ORIGINAL

0000128159

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

GARY PIERCE - CHAIRMAN
BOB STUMP
SANDRA D. KENNEDY
PAUL NEWMAN
BRENDA BURNS

IN THE MATTER OF THE APPLICATION OF CHINO MEADOWS II WATER COMPANY FOR A RATE INCREASE.	DOCKET NO. W-02370A-10-0519 **STAFF'S NOTICE OF FILING DIRECT TESTIMONY**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Direct Testimonies of Juan C. Manrique, Jian Liu and Crystal S. Brown in the above-referenced matter.

RESPECTFULLY SUBMITTED this 8th day of August, 2011.

Charles H. Hains
Attorney, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007
(602) 542-3402

Original and thirteen (13) copies of the foregoing filed this 8th day of August, 2011, with:

Docket Control
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Copy of the foregoing mailed this 8th day of August, 2011, to:

Paul D. Levie, President
Matthew Lauterbach
CHINO MEADOWS II WATER CO.
2465 Shane Drive
Prescott, Arizona 86305

Roseann Osorio

RECEIVED
2011 AUG -8 P 4:53
AZ CORP COMMISSION
DOCKET CONTROL

Arizona Corporation Commission
DOCKETED
AUG 8 2011
DOCKETED BY

BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF CHINO MEADOWS II WATER COMPANY, INC.) FOR APPROVAL OF A RATE INCREASE)	DOCKET NO. W-02370A-10-0519

DIRECT

TESTIMONY

OF

JUAN C. MANRIQUE

PUBLIC UTILITIES ANALYST I

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

AUGUST 8, 2011

TABLE OF CONTENTS

SCHEDULES

EXECUTIVE SUMMARY
CHINO MEADOWS II WATER COMPANY
DOCKET NO. W-02370A-10-0519

The direct testimony of Staff witness Juan C. Manrique addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Chino Meadows II Water Company ("Applicant") for this proceeding consisting of 0.0 percent debt and 100.0 percent equity which is the Applicant's actual capital structure.

Cost of Equity – Staff recommends that the Commission adopt a 9.6 percent return on equity ("ROE") for the Applicant. Staff's estimated ROE for the Applicant is based on cost of equity estimates for the sample companies ranging from 9.2 percent for the discounted cash flow method ("DCF") to 9.9 percent for the capital asset pricing model ("CAPM").

Cost of Debt – Chino Meadows' capital structure contains no debt.

Overall Rate of Return – Staff recommends that the Commission adopt a 9.6 percent overall rate of return ("ROR").

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Juan C. Manrique. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst.

A. In my position as a Public Utilities Analyst, I perform studies to estimate the cost of capital component in rate filings to determine the overall revenue requirement and analyze requests for financing authorizations.

Q. Please describe your educational background and professional experience.

A. I graduated from Arizona State University and received a Bachelor of Science degree in Finance. My course of studies included courses in corporate and international finance, investments, accounting, statistics, and economics. I began employment as a Staff Public Utilities Analyst in October 2008. My professional experience includes two years as a Loan Officer with a homebuilder and as an Associate for an Investor Relations firm.

Q. What is the scope of your testimony in this case?

A. My testimony provides Staff's recommended capital structure, cost of debt, return on equity ("ROE") and overall rate of return ("ROR") for establishing the revenue requirements for Chino Meadows II Water Company's ("CM II" or "Applicant") pending rate application.

Q. Please provide a brief description of CM II.

A. CM II is a for-profit Arizona corporation located in Prescott, Arizona, that is engaged in the business of providing public water (approximately 890 customers) utility service in a portion of Yavapai County, Arizona.

Summary of Testimony and Recommendations

Q. Briefly summarize how Staff's cost of capital testimony is organized.

A. Staff's cost of capital testimony is presented in eleven sections. Section I is this introduction. Section II discusses the concept of weighted average cost of capital ("WACC"). Section III presents the concept of capital structure and presents Staff's recommended capital structure for CM II in this proceeding. Section IV discusses the concepts of ROE and risk. Section V presents the methods employed by Staff to estimate CM II's ROE. Section VI presents the findings of Staff's ROE analysis. Section VII presents Staff's final cost of equity estimates for CM II. Section VIII presents Staff's Cost of Debt recommendation. Section IX presents Staff's ROR recommendation. Finally Section X presents the conclusions.

Q. Have you prepared any exhibits to accompany your testimony?

A. Yes. I prepared nine schedules (JCM-1 to JCM-9) that support Staff's cost of capital analysis.

Q. What is Staff's recommended rate of return for CM II?

A. Staff recommends a 9.6 percent overall ROR, as shown in Schedule JCM-1. Staff's ROR recommendation is based on cost of equity estimates for CM II that range from 9.2 percent using the discounted cash flow method ("DCF") to 9.9 percent using the capital asset pricing model ("CAPM") and no debt in the Company's capital structure.

CM II's Proposed Overall Rate of Return

Q. Briefly summarize CM II's proposed capital structure, cost of debt, ROE and overall ROR for this proceeding.

A. Table 1 summarizes the Applicant's proposed capital structure, cost of debt, ROE and overall ROR in this proceeding:

Table 1

	Weight	Cost	Weighted Cost
Long-term Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	10.81%	10.81%
Cost of Capital/ROR			**10.81%**

CM II is proposing an overall rate of return of 10.81 percent.

II. THE WEIGHTED AVERAGE COST OF CAPITAL

Q. Briefly explain the cost of capital concept.

A. The cost of capital is the opportunity cost of choosing one investment over others with equivalent risk. In other words, the cost of capital is the return that stakeholders expect for investing their financial resources in a determined business venture over another business venture.

Q. What is the overall cost of capital?

A. The cost of capital to a company issuing a variety of securities (i.e., stock and indebtedness) is an average of the cost rates on all issued securities adjusted to reflect the relative amounts for each security in the company's entire capital structure. Thus, the overall cost of capital is the WACC.

Q. How is the WACC calculated?

A. The WACC is calculated by adding the weighted expected returns of a firm's securities. The WACC formula is:

Equation 1.

$$WACC = \sum_{i=1}^{n} W_i * r_i$$

In this equation, W_i is the weight given to the i^{th} security (the proportion of the i^{th} security relative to the portfolio) and r_i is the expected return on the i^{th} security.

Q. Can you provide an example demonstrating application of Equation 1?

A. Yes. For this example, assume that an entity has a capital structure composed of 60 percent debt and 40 percent equity. Also, assume that the embedded cost of debt is 6.0 percent and the expected return on equity, i.e. the cost of equity, is 10.5 percent. Calculation of the WACC is as follows:

WACC = (60% * 6.0%) + (40% * 10.5%)

WACC = 3.60% + 4.20%

WACC = 7.80%

The WACC in this example is 7.80 percent. The entity in this example would need to earn an overall rate of return of 7.80 percent to cover its cost of capital.

III. CAPITAL STRUCTURE

Background

Q. Please explain the capital structure concept.

A. The capital structure of a firm is the relative proportions of each type of security—short-term debt, long-term debt (including capital leases), preferred stock and common stock—that are used to finance the firm's assets.

Q. How is the capital structure expressed?

A. The capital structure of a company is expressed as the percentage of each component of the capital structure (capital leases, short-term debt, long-term debt, preferred stock and common stock) relative to the entire capital structure.

As an example, the capital structure for an entity that is financed by $20,000 of capital leases, $85,000 of long-term debt, $15,000 of preferred stock and $80,000 of common stock is shown in Table 2.

Table 2

Component			%
Capital Leases	$20,000	($20,000/$200,000)	10.0%
Long-Term Debt	$85,000	($85,000/$200,000)	42.5%
Preferred Stock	$15,000	($15,000/$200,000)	7.5%
Common Stock	$80,000	($80,000/$200,000)	40.0%
Total	$200,000		100%

The capital structure in this example is composed of 0.0 percent short-term debt, 10.0 percent capital leases, 42.5 percent long-term debt, 7.5 percent preferred stock and 40.0 percent common stock.

CM II's Capital Structure

Q. What capital structure does CM II propose?

A. The Applicant proposes a capital structure composed of 0.0 percent debt and 100.0 percent common equity.

Q. How does CM II's proposed capital structure compare to capital structures of the publicly-traded water utilities?

A. CM II's capital structure is composed of 0.0 percent debt and 100.0 percent equity. Schedule JCM-4 shows the capital structures of six publicly-traded water companies ("sample water companies") as of December 2010. The average capital structure for the sample water companies is comprised of approximately 53.2 percent debt and 46.8 percent equity.

Staff's Capital Structure

Q. What is Staff's recommended capital structure for CM II?

A. Staff recommends using the Applicant's current capital structure which is composed of 0.0 percent debt and 100.0 percent equity.

IV. RETURN ON EQUITY

Background

Q. Please define the term "cost of equity capital."

A. The cost of equity is the rate of return that investors expect to earn on their investment in a business entity given its risk. In other words, the cost of equity to the entity is the investors' expected rate of return on other investments of similar risk. As investors have a wide selection of stocks to choose from, they will choose stocks with similar risks but higher returns. Therefore, the market determines the entity's cost of equity.

Q. Is there a correlation between interest rates and the cost of equity?

A. Yes. The cost of equity tends to move in the same direction as interest rates. This relationship is part of the CAPM formula. The CAPM is a market-based model employed by Staff for estimating the cost of equity. The CAPM is further discussed in Section V of this testimony.

Q. What has been the general trend of interest rates in recent years?

A. A chronological chart of interest rates is a good tool to show interest rate history and identify trends. Chart 1 graphs intermediate U.S. treasury rates from June 2001 to June 2011.

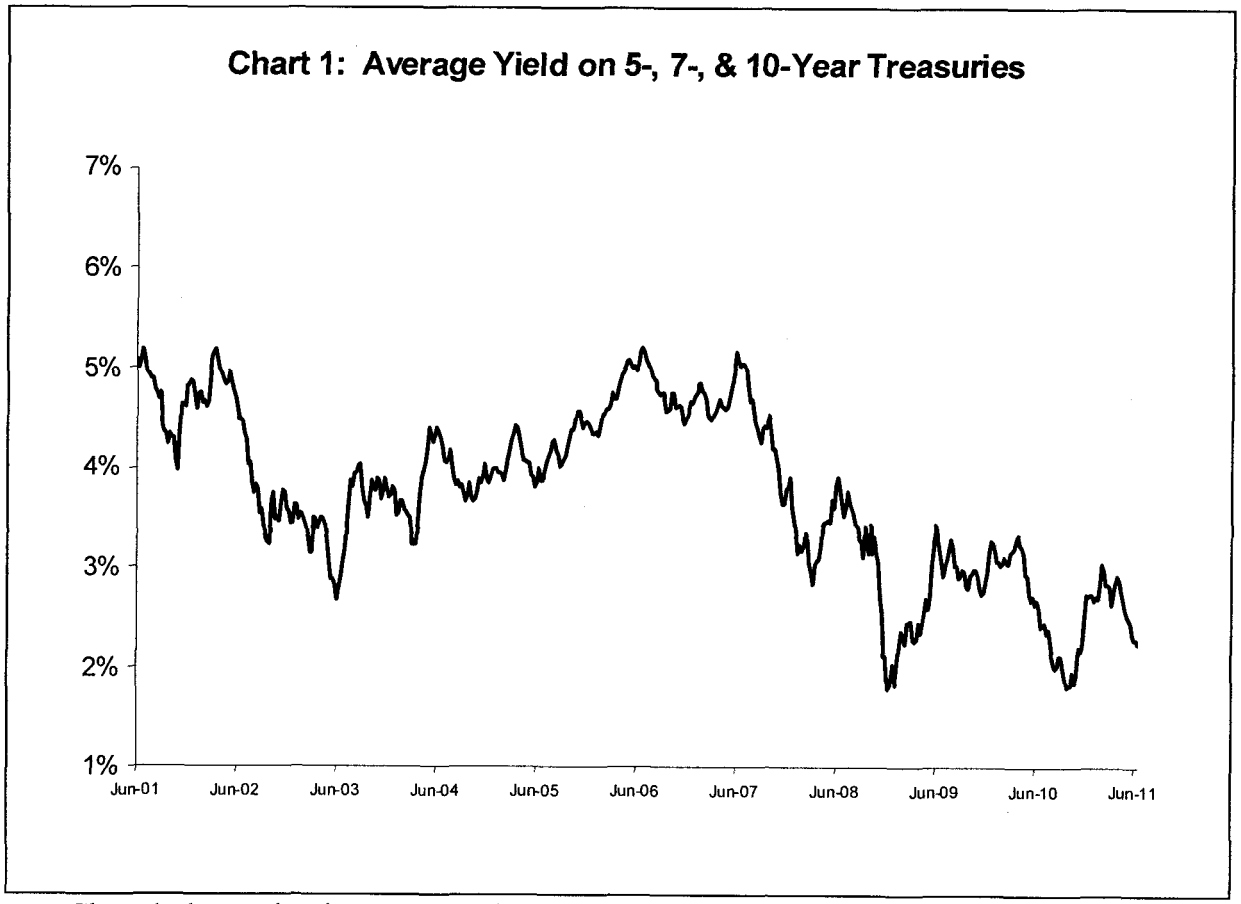
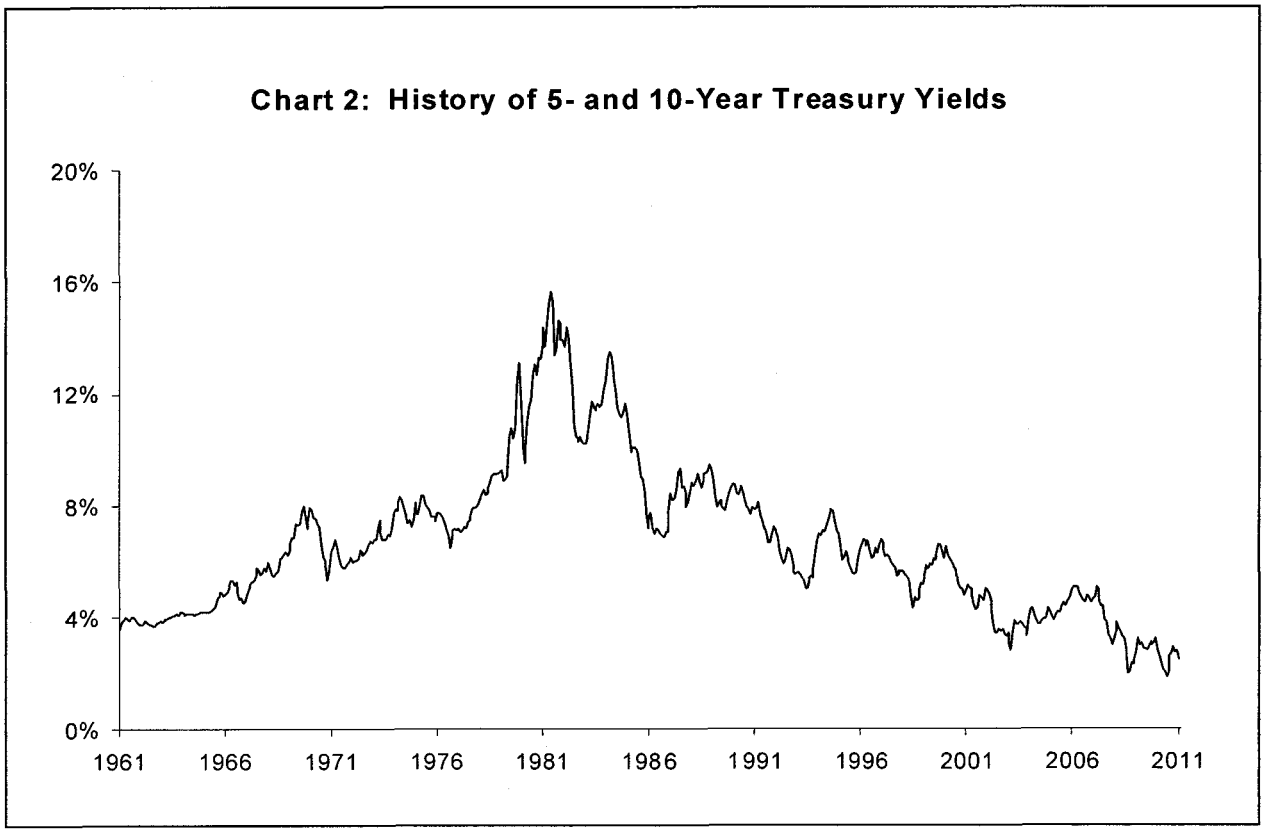


Chart 1 shows that intermediate interest rates trended downward from 2000 to mid-2003, then turned slightly upward until mid-2007 and have trended downward since with dips in early-2009, again in early-2010 and are decreasing currently.

Q. What has been the general trend in interest rates longer term?

A. U.S. Treasury rates from 1959 to present are shown in Chart 2. The chart shows that interest rates trended upward through the mid-1980s and have trended downward over the last 25 years.



Source: Federal Reserve

Q. Do these trends suggest anything in terms of cost of equity?

A. Yes. As previously discussed, interest rates and cost of equity tend to move in the same direction. The implication is that the cost of equity has declined in the past 25 years.

Q. Do actual returns represent the cost of equity?

A. No. The cost of equity represents investors' *expected* returns and not realized returns.

Q. Is there any information available that leads to an understanding of the relationship between the equity returns required for a regulated water utility and those required in the market as a whole?

A. Yes. A comparison of betas, a component of the CAPM discussed in Section V, for the water utility industry and the market provide insight into this relationship. The average beta (0.76)[1] for a water utility is lower than the theoretical average beta for all stocks (1.0). According to the CAPM formula, the cost of equity capital moves in the same direction as beta. Since the beta for the water utility industry is lower than the beta for the market, the implication is that the required return on equity for a regulated water utility is below the average required return on the market.

Risk

Q. Please define risk in relation to cost of capital.

A. Risk, as it relates to an investment, is the variability or uncertainty of the returns on a particular security. Investors are risk averse and require a greater potential return to invest in relatively greater risk opportunities, i.e., investors require compensation for taking on additional risk. Risk is generally separated into two components. Those components are market risk (systematic risk) and non-market risk (diversifiable risk or firm-specific risk).

Q. What is market risk?

A. Market risk or systematic risk is the risk of an investment that cannot be reduced through diversification. Market risk stems from factors that affect all securities such as recessions, war, inflation and high interest rates. Since these factors affect the entire market they cannot be eliminated through diversification. Market risk does not impact each security to

[1] See Schedule JCM-7

the same degree. The degree to which any security's returns are affected by the market can be measured using Beta. Beta reflects the business risk and the financial risk of a security.

Q. Please define business risk.

A. Business risk is the fluctuation of earnings inherent in a firm's operations and environment, such as competition and adverse economic conditions that may impair its ability to provide returns on investment. Companies in the same or similar line of business tend to experience the same fluctuations in business cycles.

Q. Please define financial risk.

A. Financial risk is the fluctuation of earnings inherent in using debt financing by a firm that may impair its ability to provide adequate return. The more a company uses debt financing, the more the company becomes exposed to financial risk.

Q. Do business risk and financial risk affect the cost of equity?

A. Yes.

Q. Is a firm subject to any other risk?

A. Yes. Firms are also subject to unsystematic or firm-specific risk. Examples of unsystematic risk include losses caused by labor problems, nationalization of assets, loss of a big client or weather conditions. Investors can eliminate firm-specific risk by holding a diverse portfolio; thus, it is not of concern to diversified investors.

Q. How does CM II's financial risk compare to the sample water companies' financial risk from the perspective of an investor?

A. From an investor's perspective CM II's capital structure is less risky than the sample water companies. Schedule JCM-4 shows the capital structures of the sample water companies as of December 2010, as well as CM II's actual capital structure. As of September 2010, the sample water companies were capitalized with approximately 53.2 percent debt and 46.8 percent equity, while CM II's actual capital structure consists of approximately 0.0 percent debt and 100.0 percent equity. Thus, CM II's shareholders bear less financial risk than the shareholders of the sample companies.

Q. Is firm-specific risk measured by beta?

A. No. Firm-specific risk is not measured by beta.

Q. Is the cost of equity affected by firm-specific risk?

A. No. Since firm-specific risk can be eliminated through diversification, it does not affect the cost of equity.

Q. Can investors expect additional returns for firm-specific risk?

A. No. Investors who hold diversified portfolios can eliminate firm-specific risk and, consequently, do not require any additional return. Since investors who choose to be less than fully-diversified must compete in the market with fully-diversified investors, the former cannot expect to be compensated for unique risk.

V. ESTIMATING THE COST OF EQUITY

Introduction

Q. Did Staff directly estimate the cost of equity for CM II?

A. No. Since CM II is not a publicly-traded company, Staff is unable to directly estimate the Applicant's cost of equity due to the unavailability of financial information. Instead, Staff uses an average of a representative sample group to reduce the sample error resulting from random fluctuations in the market at the time the information is gathered.

Q. What companies did Staff select as proxies or comparables for CM II?

A. Staff's sample consists of the following six publicly-traded water utilities: American States Water, California Water, Aqua America, Connecticut Water Services, Middlesex Water and SJW Corp. Staff chose these companies because they are publicly-traded and receive the majority of their earnings from regulated operations.

Q. What models did Staff implement to estimate CM II's cost of equity?

A. Staff used two market-based models to estimate the cost of equity for CM II: the DCF and the CAPM.

Q. Please explain why Staff chose the DCF and CAPM models.

A. Staff chose to use the DCF and CAPM models because they are widely-recognized market-based models and have been used extensively to estimate the cost of equity. An explanation of the DCF and CAPM models follows.

Discounted Cash Flow Model Analysis

Q. Please provide a brief summary of the theory upon which the DCF method of estimating the cost of equity is based.

A. The DCF method of stock valuation is based on the theory that the value of an investment is equal to the sum of the future cash flows generated from the aforementioned investment discounted to the present time. This method uses expected dividends, market price and dividend growth rate to calculate the cost of capital. Professor Myron Gordon pioneered the DCF method in the 1960s. The DCF method has become widely used to estimate the cost of equity for public utilities due to its theoretical merit and its simplicity. Staff used the financial information for the relevant six sample companies in the DCF model and averaged the results to determine an estimated cost of equity for the sample companies.

Q. Does Staff use more than one version of the DCF model?

A. Yes. Staff uses two versions of the DCF model: the constant-growth DCF and the multi-stage or non-constant growth DCF. The constant-growth DCF model assumes that an entity's dividends will grow indefinitely at the same rate. The multi-stage growth DCF model assumes that the dividend growth rate will change at some point in the future.

The Constant-Growth DCF

Q. What is the mathematical formula used in Staff's constant-growth DCF analysis?

A. The constant-growth DCF formula used in Staff's analysis is:

Equation 2 :

$$K = \frac{D_1}{P_0} + g$$

where : K = the cost of equity
D_1 = the expected annual dividend
P_0 = the current stock price
g = the expected infinite annual growth rate of dividends

Equation 2 assumes that the entity has a constant earnings retention rate and that its earnings are expected to grow at a constant rate. According to Equation 2, a stock with a current market price of $10 per share, an expected annual dividend of $0.45 per share and an expected dividend growth rate of 3.0 percent per year has a cost of equity to the entity of 7.5 percent reflected by the sum of the dividend yield ($0.45/ $10 = 4.5 percent) and the 3.0 percent annual dividend growth rate.

Q. How did Staff calculate the dividend yield component (D_1/P_0) of the constant-growth DCF formula?

A. Staff calculated the yield component of the DCF formula by dividing the expected annual dividend[2] (D_1) by the spot stock price (P_0) after the close of the market June 22, 2011, as reported by the website *MSN Money*.

Q. Why did Staff use the June 22, 2011, spot price rather than a historical average stock price to calculate the dividend yield component of the DCF formula?

A. Current, rather than historic, market stock price is used in order to be consistent with finance theory, i.e., the efficient market hypothesis. The efficient market hypothesis asserts that the current stock price reflects all available information on a stock including investors' expectations of future returns. Use of a historical average of stock prices illogically discounts the most recent information in favor of less recent information. The latter is stale and is representative of underlying conditions that may have changed.

[2] Value Line Summary & Index. 7-1-11.

Q. How did Staff estimate the dividend growth (g) component of the constant-growth DCF model represented by Equation 2?

A. The dividend growth component used by Staff is determined by the average of six different estimation methods, as shown in Schedule JCM-8. Staff calculated historical and projected growth estimates on dividend-per-share ("DPS"),[3] earnings-per-share ("EPS")[4] and sustainable growth bases.

Q. Why did Staff examine EPS growth to estimate the dividend growth component of the constant-growth DCF model?

A. Historic and projected EPS growth are used because dividends are related to earnings. Dividend distributions may exceed earnings in the short run but cannot continue indefinitely. In the long term, dividend distributions are dependent on earnings.

Q. How did Staff estimate historical DPS growth?

A. Staff estimated historical DPS growth by calculating the average rate of growth in DPS of the sample water companies from 2000 to 2010. The results of that calculation are shown in Schedule JCM-5. Staff calculated an average historical DPS growth rate of 3.2 percent for the sample water utilities for the aforementioned period.

Q. How did Staff estimate the projected DPS growth?

A. Staff calculated an average of the projected DPS growth rates for the sample water utilities from *Value Line*. The average projected DPS growth rate is 4.1 percent, as shown in Schedule JCM-5.

[3] Derived from information provided by *Value Line*.
[4] Derived from information provided by *Value Line*.

Q. How did Staff calculate the historical EPS growth rate?

A. Staff estimated historical EPS growth by calculating the average rate of growth in EPS of the sample water companies from 2000 to 2010. Staff calculated an average historical EPS growth rate of 4.4 percent for the sample water companies for the aforementioned period, as shown in Schedule JCM-5.

Q. How did Staff estimate the projected EPS growth?

A. Staff calculated an average of the projected EPS growth rates for the sample water companies from *Value Line*. The average projected EPS growth rate is 6.0 percent, as shown in Schedule JCM-5.

Q. How does Staff calculate its historical and projected sustainable growth rates?

A. Historical and projected sustainable growth rates are calculated by adding their respective retention growth rate terms (br) to their respective stock financing growth rate terms (vs), as shown in Schedule JCM-6.

Q. What is retention growth?

A. Retention growth is the growth in dividends due to the retention of earnings. The retention growth concept is based on the theory that dividend growth cannot be achieved unless the company retains and reinvests some of its earnings. The retention growth is used in Staff's calculation of sustainable growth shown in Schedule JCM-6.

Q. What is the formula for the retention growth rate?

A. The retention growth rate is the product of the retention ratio and the book/accounting return on equity. The retention growth rate formula is:

Equation 3 :

Retention Growth Rate = br

where : b = the retention ratio (1 – dividend payout ratio)
r = the accounting/book return on common equity

Q. How did Staff calculate the average historical retention growth rate (br) for the sample water companies?

A. Staff calculated the historical retention rates by averaging the retention rates for the sample water companies from 2001 to 2010. The historical average retention (br) growth for the sample water utilities is 2.9 percent, as shown in Schedule JCM-6.

Q. How did Staff determine projected retention growth rate (br) for the sample water companies?

A. Staff used the retention growth projections for the sample water companies for the period 2014 to 2016 from *Value Line.* The projected average retention growth rate for the sample water companies is 4.8 percent, as shown in Schedule JCM-6.

Q. When can retention growth provide a reasonable estimate of future dividend growth?

A. The retention growth rate is a reasonable estimate of future dividend growth when the retention ratio is reasonably constant and the entity's market price to book value ("market-to-book ratio") is expected to be 1.0. The average retention ratio has been reasonably constant in recent years. However, the market-to-book ratio for the sample water utilities is 1.9, notably higher than 1.0, as shown in Schedule JCM-7.

Q. Is there any financial implication of a market-to-book ratio greater than 1.0?

A. Yes. A market-to-book ratio greater than 1.0 implies that investors expect an entity to earn an accounting/book return on its equity that exceeds its cost of equity. The relationship between required returns and expected cash flows is readily observed in the fixed securities market. For example, assume an entity contemplating issuance of bonds with a face value of $10 million at either 6 percent or 8 percent, and thus, paying annual interest of $600,000 or $800,000, respectively. Regardless of investors' required return on similar bonds, investors will be willing to pay more for the bonds if issued at 8 percent than if the bonds are issued at 6 percent. For example, if the current interest rate required by investors is 6 percent, then they would bid $10 million for the 6 percent bonds and more than $10 million for the 8 percent bonds. Similarly, if equity investors require a 9 percent return and expect an entity to earn accounting/book returns of 13 percent, the market will bid up the price of the entity's stock to provide the required return of 9 percent.

Q. How has Staff generally recognized a market-to-book ratio exceeding 1.0 in its cost of equity analyses in recent years?

A. Staff has assumed that investors expect the market-to-book ratio to remain greater than 1.0. Given that assumption, Staff has added a stock financing growth rate (vs) term to the retention ratio (br) term to calculate its historical and projected sustainable growth rates.

Q. Do the historical and projected sustainable growth rates Staff uses to develop its DCF cost of equity in this case continue to include a stock financing growth rate term?

A. Yes.

Q. What is stock financing growth?

A. Stock financing growth is the growth in an entity's dividends due to the sale of stock by that entity. Stock financing growth is a concept derived by Myron Gordon and discussed in his book *The Cost of Capital to a Public Utility.*[5] Stock financing growth is the product of the fraction of the funds raised from the sale of stock that accrues to existing shareholders (v) and the fraction resulting from dividing the funds raised from the sale of stock by the existing common equity (s).

Q. What is the mathematical formula for the stock financing growth rate?

A. The mathematical formula for stock financing growth is:

Equation 4:

$$\text{Stock Financing Growth} = vs$$

where: v = Fraction of the funds raised from the sale of stock that accrues to existing shareholders

s = Funds raised from the sale of stock as a fraction of the existing common equity

Q. How is the variable *v* presented above calculated?

A. Variable *v* is calculated as follows:

Equation 5:

$$v = 1 - \left(\frac{book\ value}{market\ value} \right)$$

For example, assume that a share of stock has a $30 book value and is selling for $45. Then, to find the value of *v*, the formula is applied:

[5] Gordon, Myron J. *The Cost of Capital to a Public Utility.* MSU Public Utilities Studies, Michigan, 1974. pp 31-35.

$$v = 1 - \left(\frac{30}{45}\right)$$

In this example, v is equal to 0.33.

Q. How is the variable *s* presented above calculated?

A. Variable s is calculated as follows:

Equation 6:

$$s = \frac{\text{Funds raised from the issuance of stock}}{\text{Total existing common equity before the issuance}}$$

For example, assume that an entity has $150 in existing equity, and it sells $30 of stock. Then, to find the value of s, the formula is applied:

$$s = \left(\frac{30}{150}\right)$$

In this example, s is equal to 20.0 percent.

Q. What is the *vs* term when the market-to-book ratio is equal to 1.0?

A. A market-to-book ratio equal to 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment equal to the cost of equity. When the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders, i.e., the term v is equal to zero (0.0). Consequently, the vs term is also equal to zero (0.0). When stock financing growth is zero, dividend growth depends solely on the br term.

Q. What is the effect of the *vs* term when the market-to-book ratio is greater than 1.0?

A. A market-to-book ratio greater than 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment greater than the cost of equity. Equation 5 shows that when the market-to-book ratio is greater than 1.0 the *v* term is also greater than zero. The excess by which new shares are issued and sold over book value per share of outstanding stock is a contribution that accrues to existing stockholders in the form of a higher book value. The resulting higher book value leads to higher expected earnings and dividends. Continued growth from the *vs* term is dependent upon the continued issuance and sale of additional shares at a price that exceeds book value per share.

Q. What *vs* estimate did Staff calculate from its analysis of the sample water companies?

A. Staff estimated an average stock financing growth of 2.5 percent for the sample water companies, as shown in Schedule JCM-6.

Q. What would occur if an entity had a market-to-book ratio greater than 1.0 as a result of investors expecting earnings to exceed the cost of equity capital and the entity subsequently experienced newly-authorized rates equal to its cost of equity capital?

A. Market pressure on the entity's stock price to reflect the change in future expected cash flows would cause the market-to-book ratio to move toward 1.0.

Q. Is inclusion of the *vs* term necessary if the average market-to-book ratio of the sample water utilities falls to 1.0 due to authorized ROEs equaling the cost of equity?

A. No. As discussed above, when the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders because the *v* term equals to zero, and consequently, the *vs* term also equals zero. When

the market-to-book ratio equals 1.0, dividend growth depends solely on the *br* term. Staff's inclusion of the *vs* term assumes that the market-to-book ratio continues to exceed 1.0 and that the water utilities will continue to issue and sell stock at prices above book value with the effect of benefitting existing shareholders.

Q. What are Staff's historical and projected sustainable growth rates?

A. Staff's estimated historical sustainable growth rate is 5.4 percent based on an analysis of earnings retention for the sample water companies. Staff's projected sustainable growth rate is 7.3 percent based on retention growth projected by *Value Line.* Schedule JCM-6 presents Staff's estimates of the sustainable growth rate.

Q. What is Staff's expected infinite annual growth rate in dividends?

A. Staff's expected infinite annual growth rate in dividends is 5.1 percent which is the average of historical and projected DPS, EPS, and sustainable growth estimates. Staff's calculation of the expected infinite annual growth rate in dividends is shown in Schedule JCM-8.

Q. What is Staff's constant-growth DCF estimate for the sample utilities?

A. Staff's constant-growth DCF estimate is 8.5 percent, as shown in Schedule JCM-3.

The Multi-Stage DCF

Q. Why did Staff implement the multi-stage DCF model to estimate CM II's cost of equity?

A. Staff generally uses the multi-stage DCF model to consider the assumption that dividends may not grow at a constant rate. The multi-stage DCF uses two stages of growth. The first stage is four years followed by the second constant growth stage.

Q. What is the mathematical formula for the multi-stage DCF?

A. The multi-stage DCF formula is shown in the following equation:

Equation 7 :

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non – constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

Q. What steps did Staff take to implement its multi-stage DCF cost of equity model?

A. First, Staff projected future dividends for each of the sample water utilities using near-term and long-term growth rates. Second, Staff calculated the rate (cost of equity) which equates the present value of the forecasted dividends to the current stock price for each of the sample water utilities. Lastly, Staff calculated an average of the individual sample company cost of equity estimates.

Q. How did Staff calculate near-term (stage-1) growth?

A. The stage-1 growth rate is based on *Value Line's* projected dividends for the next twelve months, when available, and on the average dividend growth rate (5.1 percent) calculated in Staff's constant DCF analysis for the remainder of the stage.

Q. How did Staff estimate long-term (stage-2) growth?

A. Staff calculated the stage-2 growth rate using the arithmetic mean rate of growth in GDP from 1929 to 2010.[6] Using the GDP growth rate assumes that the water utility industry is expected to grow at the same rate as the overall economy.

Q. What is the historical GDP growth rate that Staff used to estimate stage-2 growth?

A. Staff used 6.6 percent to estimate the stage-2 growth rate.

Q. What is Staff's multi-stage DCF estimate for the sample utilities?

A. Staff's multi-stage DCF estimate is 9.9 percent, as shown in Schedule JCM-3.

Q. What is Staff's overall DCF estimate for the sample utilities?

A. Staff's overall DCF estimate is 9.2 percent. Staff calculated the overall DCF estimate by averaging the constant growth DCF (8.5 percent) and multi-stage DCF (9.9 percent) estimates, as shown in Schedule JCM-3.

Capital Asset Pricing Model

Q. Please describe the CAPM.

A. The CAPM is used to determine the prices of securities in a competitive market. The CAPM model describes the relationship between a security's investment risk and its market rate of return. Under the CAPM an investor requires the expected return of a security to equal the rate on a risk-free security plus a risk premium. If the investor's expected return does not meet or beat the required return, the investment is not economically justified. The model also assumes that investors will sufficiently diversify

[6] www.bea.doc.gov.

their investments to eliminate any non-systematic or unique risk.[7] In 1990, Professors Harry Markowitz, William Sharpe, and Merton Miller earned the Nobel Prize in Economic Sciences for their contribution to the development of the CAPM.

Q. Did Staff use the same sample water utilities in its CAPM and DCF cost of equity estimation analyses?

A. Yes. Staff's CAPM cost of equity estimation analysis uses the same sample water companies as its DCF cost of equity estimation analysis.

Q. What is the mathematical formula for the CAPM?

A. The mathematical formula for the CAPM is:

Equation 8:

$$K = R_f + \beta (R_m - R_f)$$

where:

R_f = risk free rate
R_m = return on market
β = beta
$R_m - R_f$ = market risk premium
K = expected return

The equation shows that the expected return (K) on a risky asset is equal to the risk-free interest rate (R_f) plus the product of the market risk premium ("Rp") ($R_m - R_f$) multiplied by beta (β) where beta represents the riskiness of the investment relative to the market.

[7] The CAPM makes the following assumptions: 1) single holding period; 2) perfect and competitive securities market; 3) no transaction costs; 4) no restrictions on short selling or borrowing; 5) the existence of a risk-free rate; and 6) homogeneous expectations.

Q. What is the risk free rate?

A. The risk free rate is the rate of return of an investment with zero risk.

Q. What does Staff use as surrogates to represent estimations of the risk-free rates of interest in its historical and current market risk premium CAPM methods?

A. Staff uses separate parameters as surrogates for the estimations of the risk-free rates of interest for the historical market risk premium CAPM cost of equity estimation and the current market risk premium CAPM cost of equity estimation. Staff uses the average of three (five-, seven-, and ten-year) intermediate-term U.S. Treasury securities' spot rates in its historical market risk premium CAPM cost of equity estimation, and the 30-year U.S. Treasury bond spot rate in its current market risk premium CAPM cost of equity estimation. U.S. Treasuries are largely verifiable and readily available.

Q. What does beta measure?

A. Beta measures the volatility, or systematic risk, of a security relative to the market. Since systematic risk cannot be diversified away, it is the only risk that is relevant when estimating a security's required return. Using a baseline market beta of 1.0, a security with a beta less than 1.0 will be less volatile than the market. A security with a beta greater than 1.0 will be more volatile than the market.

Q. How did Staff estimate CM II's beta?

A. Staff used the average of the *Value Line* betas for the sample water companies as a proxy for CM II's beta. Schedule JCM-7 shows the *Value Line* betas for each of the sample water companies. The 0.76 average beta for the sample water companies is Staff's estimated beta for CM II. A security with a 0.76 beta has less volatility than the market.

Q. Please describe expected market risk premium ($R_m - R_f$)?

A. The expected market risk premium is the expected return on the market above the risk free rate. Simplified, it is the return an investor expects as compensation for market risk.

Q. What did Staff use for the market risk premium?

A. Staff uses separate calculations for the market risk premium in its historical and current market risk premium CAPM methods.

Q. How did Staff calculate an estimate for the market risk premium in its historical market risk premium CAPM method?

A. Staff uses the intermediate-term government bond income returns published in the Ibbotson Associates' *Stocks, Bonds, Bills, and Inflation 2010 Yearbook* to calculate the historical market risk premium. Ibbotson Associates calculates the historical risk premium by averaging the historical arithmetic differences between the S&P 500 and the intermediate-term government bond income returns for the period 1926-2010. Staff's historical market risk premium estimate is 7.2 percent, as shown in Schedule JCM-3.

Q. How did Staff calculate an estimate for the market risk premium in its current market risk premium CAPM method?

A. Staff solves equation 8 above to arrive at a market risk premium using a DCF derived expected return (K) of 14.47 (2.0 + 12.47[8]) percent using the expected dividend yield (2.0 percent over the next twelve months) and the annual per share growth rate (12.47 percent) that *Value Line* projects for all dividend-paying stocks under its review[9] along with the current long-term risk-free rate (30-year Treasury note at 4.22 percent) and the market's

[8] The three to five year price appreciation is 60%. $1.60^{0.25}$ - 1 = 12.47%.
[9] July 1, 2011 issue date.

average beta of 1.0. Staff calculated the current market risk premium as 10.25[10] as shown in Schedule JCM-3.

Q. What is the result of Staff's historical market risk premium CAPM and current market risk premium CAPM cost of equity estimations for the sample utilities?

A. Staff's cost of equity estimates are 7.7 percent using the historical market risk premium CAPM and 12.0 using the current market risk premium CAPM.

Q. What is Staff's overall CAPM estimate for the sample utilities?

A. Staff's overall CAPM cost of equity estimate is 9.9 percent which is the average of the historical market risk premium CAPM (7.7 percent) and the current market risk premium CAPM (12.0 percent) estimates, as shown in Schedule JCM-3.

VI. SUMMARY OF STAFF'S COST OF EQUITY ANALYSIS

Q. What is the result of Staff's constant-growth DCF analysis to estimate of the cost of equity to the sample water companies?

A. Schedule JCM-3 shows the result of Staff's constant-growth DCF analysis. The result of Staff's constant-growth DCF analysis is as follows:

$$k = 3.4\% + 5.1\%$$

$$k = \mathbf{8.5\%}$$

Staff's constant-growth DCF estimate of the cost of equity to the sample water companies is 8.5 percent.

[10] 14.47% = 4.22% + (1) (10.25%).

Q. What is the result of Staff's multi-stage DCF analysis to estimate of the cost of equity for the sample water companies?

A. Schedule JCM-9 shows the result of Staff's multi-stage DCF analysis. The result of Staff's multi-stage DCF analysis is:

Applicant	Equity Cost Estimate (k)
American States Water	9.6%
California Water	10.0%
Aqua America	9.2%
Connecticut Water	10.2%
Middlesex Water	10.5%
SJW Corp	9.6%
Average	**9.9%**

Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 9.9 percent.

Q. What is Staff's overall DCF estimate of the cost of equity for the sample utilities?

A. Staff's overall DCF estimate of the cost of equity for the sample utilities is 9.2 percent. Staff calculated an overall DCF cost of equity estimate by averaging Staff's constant growth DCF (8.5 percent) and Staff's multi-stage DCF (9.9 percent) estimates, as shown in Schedule JCM-3.

Q. What is the result of Staff's historical market risk premium CAPM analysis to estimate of the cost of equity for the sample water companies?

A. Schedule JCM-3 shows the result of Staff's CAPM analysis using the historical risk premium estimate. The result is as follows:

$$k = 2.3\% + 0.76 * 7.2\%$$

$$k = 7.7\%$$

Staff's CAPM estimate (using the historical market risk premium) of the cost of equity to the sample water utilities is 7.7 percent.

Q. What is the result of Staff's current market risk premium CAPM analysis to estimate the cost of equity for the sample water companies

A. Schedule JCM-3 shows the result of Staff's CAPM analysis using the current market risk premium estimate. The result is:

$$k = 4.2\% + 0.76 * 10.2\%$$

$$k = 12.0\%$$

Staff's CAPM estimate (using the current market risk premium) of the cost of equity to the sample water utilities is 12.0 percent.

Q. What is Staff's overall CAPM estimate of the cost of equity for the sample utilities?

A. Staff's overall CAPM estimate for the sample utilities is 9.9 percent. Staff's overall CAPM estimate is the average of the historical market risk premium CAPM (7.7 percent) and the current market risk premium CAPM (12.0 percent) estimates, as shown in Schedule JCM-3.

Q. Please summarize the results of Staff's cost of equity analysis for the sample utilities.

A. The following table shows the results of Staff's cost of equity analysis:

Table 2

Method	Estimate
Average DCF Estimate	9.2%
Average CAPM Estimate	9.9%
Overall Average	**9.6%**

Staff's average estimate of the cost of equity to the sample water utilities is 9.6 percent.

VII. FINAL COST OF EQUITY ESTIMATES FOR CM II

Q. Please compare CM II's capital structure to that of the six sample water companies.

A. The average capital structure for the sample water companies is composed of 46.8 percent equity and 53.2 percent debt, as shown in Schedule JCM-4. CM II's capital structure is composed of 100.0 percent equity and 0.0 percent debt. In this case, since CM II's capital structure is less leveraged than that of the average sample water companies' capital structure, its stockholders bear less financial risk than the sample water utilities. Accordingly, CM II's cost of equity is lower than that of the sample water utilities.

Q. What is Staff's ROE estimate for CM II?

A. Staff determined an ROE estimate of 9.6 percent for the Applicant based on cost of equity estimates for the sample companies ranging from 9.2 percent for the DCF to 9.9 percent for the CAPM.

Q. Why does Staff not use a financial risk adjustment to calculate the effect on the cost of equity capital of the different financial risks posed by CM II versus the sample companies?

A. In this case, Staff does not use a financial risk adjustment because CM II is not a publicly-traded company, and thus, it does not have access to the capital markets.

VIII. COST OF DEBT

Q. What is Staff's Cost of Debt recommendation?

A. CM II has no debt in its capital structure.

IX. RATE OF RETURN RECOMMENDATION

Q. What overall rate of return did Staff determine for CM II?

A. Staff determined a 9.6 percent ROR for the Applicant, as shown in Schedule JCM-1 and in the following table:

Table 3

	Weight	Cost	Weighted Cost
Long-term Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	9.6%	9.6%
Overall ROR			**9.6%**

X. CONCLUSION

Q. Please summarize Staff's recommendations.

A. Staff recommends that the Commission adopt a capital structure for CM II in this proceeding composed of 0.0 percent debt and 100.0 percent equity.

Staff also recommends that the Commission adopt a 9.6 percent ROR for the Applicant, based on Staff's cost of equity estimates that range from 9.2 percent to 9.9 percent for the sample companies.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

Chino Meadows II Water Company Cost of Capital Calculation
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]
Description	Weight (%)	Cost	Weighted Cost
Staff Recommended Structure			
Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	9.6%	9.6%
Weighted Average Cost of Capital			**9.6%**
Company Proposed Structure			
Debt	0.0%	0.0%	0.0%
Common Equity	100.0%	10.8%	10.8%
Weighted Average Cost of Capital			**10.8%**

[D] : [B] x [C]

Supporting Schedules: JCM-3 and JCM-4.

Intentionally left blank

Chino Meadows II Water Company Cost of Capital Calculation
Final Cost of Equity Estimates
Sample Water Utilities

[A]	[B]		[C]		[D]		[E]
DCF Method			D_1/P_0 [1]	+	g [2]	=	k
Constant Growth DCF Estimate			3.4%	+	5.1%	=	8.5%
Multi-Stage DCF Estimate						=	9.9%
Average of DCF Estimates							**9.2%**
CAPM Method	**Rf**	+	β [5]	x	**(Rp)**	=	k
Historical Market Risk Premium[3]	2.3%	+	0.76	x	7.2% [6]	=	7.7%
Current Market Risk Premium[4]	4.2%	+	0.76	x	10.2% [7]	=	12.0%
Average of CAPM Estimates							**9.9%**
					Average		**9.6%**
					Financial risk adjustment		
					Total		**9.6%**

1 MSN Money and Value Line

2 Schedule JCM-8

3 *Risk-free rate (Rf) for 5, 7, and 10 year Treasury rates from the U.S. Treasury Department at www.ustreas.gov*

4 Risk-free rate (Rf) for 30 Year Treasury bond rate from the U.S. Treasury Department at www.ustreas.gov

5 Value Line

6 Historical Market Risk Premium (Rp) calculated from Ibbotson Associates SBBI 2009 Yearbook data

7 Testimony

Chino Meadows II Water Company Cost of Capital Calculation
Average Capital Structure of Sample Water Utilities

[A]	[B]	[C]	[D]
Company	Debt	Common Equity	Total
American States Water	49.8%	50.2%	100.0%
California Water	53.4%	46.6%	100.0%
Aqua America	57.2%	42.8%	100.0%
Connecticut Water	55.9%	44.1%	100.0%
Middlesex Water	49.4%	50.6%	100.0%
SJW Corp	53.4%	46.6%	100.0%
Average Sample Water Utilities	**53.2%**	**46.8%**	**100.0%**
Chino Meadows - Actual Capital Structure	**0.0%**	**100.0%**	**100.0%**

Source:
Sample Water Companies from Value Line

Chino Meadows II Water Company Cost of Capital Calculation
Growth in Earnings and Dividends
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]
Company	Dividends Per Share 2000 to 2010 DPS[1]	Dividends Per Share Projected DPS[1]	Earnings Per Share 2000 to 2010 EPS[1,2]	Earnings Per Share Projected EPS[1]
American States Water	1.9%	3.7%	6.2%	2.2%
California Water	0.8%	3.0%	4.0%	4.0%
Aqua America	7.7%	6.0%	6.7%	8.4%
Connecticut Water	1.5%	No Projection	0.9%	No Projection
Middlesex Water	1.8%	No Projection	2.4%	No Projection
SJW Corp	5.2%	3.8%	3.8%	9.1%
Average Sample Water Utilities	**3.2%**	**4.1%**	**4.4%**	**6.0%**

1 Value Line

2 Negative values are inconsistent with the DCF, accordingly, they are excluded from the average.

Chino Meadows II Water Company Cost of Capital Calculation
Sustainable Growth
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]
Company	Retention Growth **2001 to 2010** br	Retention Growth Projected br	Stock Financing Growth vs	Sustainable Growth **2001 to 2010** br + vs	Sustainable Growth Projected br + vs
American States Water	3.1%	6.7%	1.7%	4.9%	8.4%
California Water	2.2%	4.2%	3.7%	5.9%	7.9%
Aqua America	4.5%	5.5%	4.4%	8.9%	9.9%
Connecticut Water	2.3%	No Projection	0.9%	3.2%	No Projection
Middlesex Water	1.3%	No Projection	4.1%	5.4%	No Projection
SJW Corp	3.9%	2.8%	0.1%	4.0%	2.9%
Average Sample Water Utilities	**2.9%**	**4.8%**	**2.5%**	**5.4%**	**7.3%**

[B]: Value Line
[C]: *Value Line*
[D]: Value Line and MSN Money
[E]: [B]+[D]
[F]: [C]+[D]

Chino Meadows II Water Company Cost of Capital Calculation
Selected Financial Data of Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[G]
Company	Symbol	Spot Price 6/22/2011	Book Value	Mkt To Book	*Value Line* Beta β	Raw Beta β *raw*
American States Water	AWR	**33.69**	20.46	1.6	**0.75**	0.60
California Water	CWT	**17.97**	10.57	1.7	**0.70**	0.52
Aqua America	WTR	**22.99**	8.70	2.6	**0.65**	0.45
Connecticut Water	CTWS	**25.24**	12.82	2.0	**0.80**	0.67
Middlesex Water	MSEX	**18.62**	10.96	1.7	**0.75**	0.60
SJW Corp	SJW	**22.80**	14.66	1.6	**0.90**	0.82
Average				**1.9**	**0.76**	**0.61**

[C]: Msn Money

[D]: Value Line

[E]: [C] / [D]

[F]: Value Line

[G]: (-0.35 + [F]) / 0.67

Chino Meadows II Water Company Cost of Capital Calculation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

[A]	[B]
Description	g
DPS Growth - Historical[1]	3.2%
DPS Growth - Projected[1]	4.1%
EPS Growth - Historical[1]	4.4%
EPS Growth - Projected[1]	6.0%
Sustainable Growth - Historical[2]	5.4%
Sustainable Growth - Projected[2]	7.3%
Average	**5.1%**

1 Schedule JCM-5

2 Schedule JCM-6

Chino Meadows II Water Company Cost of Capital Calculation
Multi-Stage DCF Estimates
Sample Water Utilities

[A]	[B]	[C]	[D]	[E]	[F]	[H]	[I]
Company	Current Mkt. Price (P_o)[1] 6/22/2011	Projected Dividends[2] (Stage 1 growth) (D_t) d_1	d_2	d_3	d_4	Stage 2 growth[3] (g_n)	Equity Cost Estimate (K)[4]
American States Water	33.7	1.07	1.12	1.18	1.24	6.6%	9.6%
California Water	18.0	0.64	0.67	0.70	0.74	6.6%	10.0%
Aqua America	23.0	0.64	0.67	0.70	0.74	6.6%	9.2%
Connecticut Water	25.2	0.94	0.99	1.04	1.09	6.6%	10.2%
Middlesex Water	18.6	0.75	0.79	0.83	0.87	6.6%	10.5%
SJW Corp	22.8	0.72	0.75	0.79	0.83	6.6%	9.6%
					Average		**9.9%**

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : P_0 = current stock price
D_t = dividends expected during stage 1
K = cost of equity
n = years of non − constant growth
D_n = dividend expected in year n
g_n = constant rate of growth expected after year n

1 [B] see Schedule JCM-7
2 Derived from Value Line Information
3 Average annual growth in GDP 1929 - 2010 in current dollars.
4 Internal Rate of Return of Projected Dividends

BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF CHINO MEADOWS II WATER FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICE THEREON.	DOCKET NO. W-02370A-10-0519

DIRECT

TESTIMONY

OF

JIAN W. LIU

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

AUGUST 08, 2011

TABLE OF CONTENTS

EXHIBIT

INTRODUCTION

Q. Please state your name and business address.

A. My name is Jian W. Liu. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. By whom and in what position are you employed?

A. I am employed by the Arizona Corporation Commission ("Commission" or "ACC") as a Utilities Engineer - Water/Wastewater in the Utilities Division.

Q. How long have you been employed by the Commission?

A. I have been employed by the Commission since October 2005.

Q. What are your responsibilities as a Utilities Engineer - Water/Wastewater?

A. My main responsibilities are to inspect, investigate and evaluate water and wastewater systems. This includes obtaining data, preparing reconstruction cost new and/or original cost studies, investigative reports, interpreting rules and regulations, and to suggest corrective action and provide technical recommendations on water and wastewater system deficiencies. I also provide written and oral testimony in rate cases and other cases before the Commission.

Q. How many companies have you analyzed for the Utilities Division?

A. I have analyzed more than 40 companies fulfilling these various responsibilities for Utilities Division Staff ("Staff").

Q. Have you previously testified before this Commission?

A. Yes, I have testified on numerous occasions before this Commission.

Q. What is your educational background?

A. I am a Ph.D. Candidate in Geotechnical Engineering from Arizona State University ("ASU"). I have a Master of Science Degree in Natural Science from ASU and a Master of Science Degree in Civil Engineering from the Institute of Rock & Soil Mechanics ("IRSM"), Academy of Sciences, China.

Q. Briefly describe your pertinent work experience.

A. From 1982 to 2000, I was employed by IRSM, SCS Engineers, and URS Corporation as a Civil and Environmental Engineer. In 2000, I joined the Arizona Department of Environmental Quality ("ADEQ"). My responsibilities with ADEQ included review and approval of water distribution systems, sewer distribution systems, and on-site wastewater treatment facilities. I remained with ADEQ until transferring to the Commission in October 2005.

Q. Please state your professional membership, registrations, and licenses.

A. I am a licensed professional civil engineer in the State of Arizona.

PURPOSE OF TESTIMONY

Q. What was your assignment in this rate proceeding?

A. My assignment was to provide Staff's engineering evaluation of the subject rate proceeding. I reviewed the Company's application and responses to data requests, and I inspected the water system. This testimony and its attachments present Staff's engineering evaluation. The findings of my engineering evaluation are contained in the Engineering Report that I have prepared for this proceeding. The report is included as Exhibit JWL in this pre-filed testimony.

ENGINEERING REPORTS

Q. Please describe the information contained in your Engineering Reports.

A. The Report is divided into three general sections: 1) *Executive Summary*; 2) *Engineering Report Discussion*, and 3) *Engineering Report Exhibits.* The *Discussions* section for the Water System can be further divided into ten subsections: A) Location of Company; B) Description of the Water System; C) ADEQ Compliance; D) ACC Compliance; E) Arizona Department Of Water Resources ("ADWR") compliance; F) Water Testing Expenses, G) Water Usage, H) Growth; I) Depreciation Rates; J) Other Issues.

RECOMMENDATIONS AND CONCLUSIONS

Q. What are Staff's conclusions and recommendations regarding the Company's operations?

A. Staff's conclusions and recommendations regarding the Company's operations are listed below.

CONCLUSIONS:

1. Arizona Department of Environment Quality ("ADEQ") regulates the Chino Meadows II Water Company ("Chino Meadows" or "the Company") water system under ADEQ Public Water System ("PWS") #13-079. ADEQ has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ report dated February 18, 2011).

2. Chino Meadows is located in the ADWR Prescott Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report dated February 14, 2011. ADWR reported that the Company is currently in compliance with departmental requirements governing water providers and/or community water systems.

3. Staff concludes that the Chino Meadows has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

4. A check of the Commission's Utilities Division Compliance Section database indicated no delinquent compliance items for Chino Meadows.

5. Chino Meadows has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

RECOMMENDATIONS

1. Staff recommends that the Company use Staff's depreciation rates by individual National Association of Regulatory Utility Commissioners category as delineated in Table B of Exhibit JWL.

2. Staff recommends the annual water testing expense of $4,766 reported by the Company be used for purposes of this application.

3. Staff recommends that the charges listed in Table C be adopted.

4. The Company does not have an approved Best Management Practices ("BMPs") tariff. Staff recommends that Chino Meadows be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of a Decision in this matter, at least five BMPs in the form of tariffs that substantially conform to the templates created by Staff, available at the Commission's website, for the Commission's review and consideration. A maximum of two of these BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories of the BMP's. The Company may request cost recovery of actual costs associated with the BMPs implemented in its next general rate application.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

EXHIBIT JWL

ENGINEERING REPORT FOR

CHINO MEADOWS II WATER CO., INC.

DOCKET NO. W-02370A-10-0519 (RATES)

JIAN W LIU

JULY 19, 2011

Engineering Report for:
Chino Meadows II Water Company
for a Rate Increase
Docket No. W-02370A-10-0519 (Rates)

By: Jian W Liu
Utilities Engineer

JULY 19, 2011

EXECUTIVE SUMMARY

CONCLUSIONS:

1. ADEQ regulates the Chino Meadows Water System under ADEQ Public Water System ("PWS") #13-079. ADEQ has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ report dated February 18, 2011).

2. Chino Meadows is located in the ADWR Prescott Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report dated February 14, 2011. ADWR reported that the Company is currently in compliance with departmental requirements governing water providers and/or community water systems.

3. Staff concludes that the Chino Meadows has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

4. A check of the Commission's Utilities Division Compliance Section database indicated no delinquent compliance items for Chino Meadows.

5. Chino Meadows has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

RECOMMENDATIONS

1. Staff recommends that the Company use Staff's depreciation rates by individual National Association of Regulatory Utility Commissioners category as delineated in Table B of Exhibit JWL.

2. Staff recommends the annual water testing expense of $4,766 reported by the Company be used for purposes of this application.

3. Staff recommends that the charges listed in Table C be adopted.

4. The Company does not have an approved Best Management Practices ("BMPs") tariff. Staff recommends that Chino Meadows be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of a Decision in this matter, at least five BMPs in the form of tariffs that substantially conform to the templates created by Staff, available at the Commission's website, for the Commission's review and consideration. A maximum of two of these BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories of the BMP's. The Company may request cost recovery of actual costs associated with the BMPs implemented in its next general rate application.

TABLE OF CONTENTS

FIGURES

A. INTRODUCTION AND LOCATION OF COMPANY

Chino Meadows II Water Company ("Chino Meadows" or "the Company") has submitted an application with the Arizona Corporation Commission ("ACC" or "Commission") for approval of a rate increase in Docket No. W-02370A-10-0519. This report constitutes Staff's engineering evaluation of the subject application. Chino Meadows presently provides utility service to approximately 889 water customers in Yavapai County, Arizona. Chino Meadows's business office is located at 2465 West Shane Dr, Prescott, AZ 86305. Figure 1 shows the location of Chino Meadows within Yavapai County and Figure 2 shows the certificated area.

B. DESCRIPTION OF THE WATER SYSTEM

The plant facilities were visited on May 5, 2011, by Jian Liu, Commission Utilities Division Staff ("Staff") Utilities Engineer, in the accompaniment of Matthew Lauterbach of the Company.

The plant facilities consist of two active wells with total pumping capacity of over 475 gallons per minute ("GPM"), four storage tanks with total storage capacity of 107,100 gallons, hydro-pneumatic pressure systems and distribution system currently serving approximately 889 active connections. Staff concludes that the Chino Meadows water system has adequate production capacity and storage capacity to serve the existing customer base and reasonable growth.

(Tabular Description of Water System)

Well Data (active wells only)

ADWR ID No.	Pump HP	Pump GPM	Casing Depth(ft)	Casing Size(in)	Meter Size(in)	Year Drilled
55-552320	15	225	335	10	3	1995
55-613770	20	250	450	12	3	1979

Storage Tanks		Pressure Tanks		Booster Pumps	
Capacity (gallons)	Quantity	Capacity (gallons)	Quantity	Capacity (HP)	Quantity
67000	1			5	1
20000	1	5,000	2	10	1
10000	2			15	4
				25	1
Total ***107,000***					

Mains		Customer Meters		Fire Hydrants
Size (inches)	Length (feet)	Size (inches)	Quantity	Quantity
2	2,698			
		5/8x3/4	889	7
4	2,872	3/4		
6	70,214	1		
		1.5		
		2		
Less than 2	33,461	3		
		4		
		Total	889	

C. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

ADEQ regulates the Chino Meadows Water System under ADEQ Public Water System ("PWS") #13-079. ADEQ has determined that the system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, and Chapter 4. (ADEQ report dated February 18, 2011).

D. ACC COMPLIANCE

A check with of the Commission's Utilities Division Compliance Section database indicated no delinquent compliance items for Chino Meadows. (Compliance Section Email dated June 20, 2011)

E. ARIZONA DEPARTMENT OF WATER RESOURCES ("ADWR") COMPLIANCE

Chino Meadows is located in the ADWR Prescott Active Management Area ("AMA") and is subject to its AMA reporting and conservation requirements. Staff received an ADWR compliance status report dated February 14, 2011. ADWR reported that the Company is currently in compliance with departmental requirements governing water providers and/or community water systems.

F. WATER TESTING EXPENSES

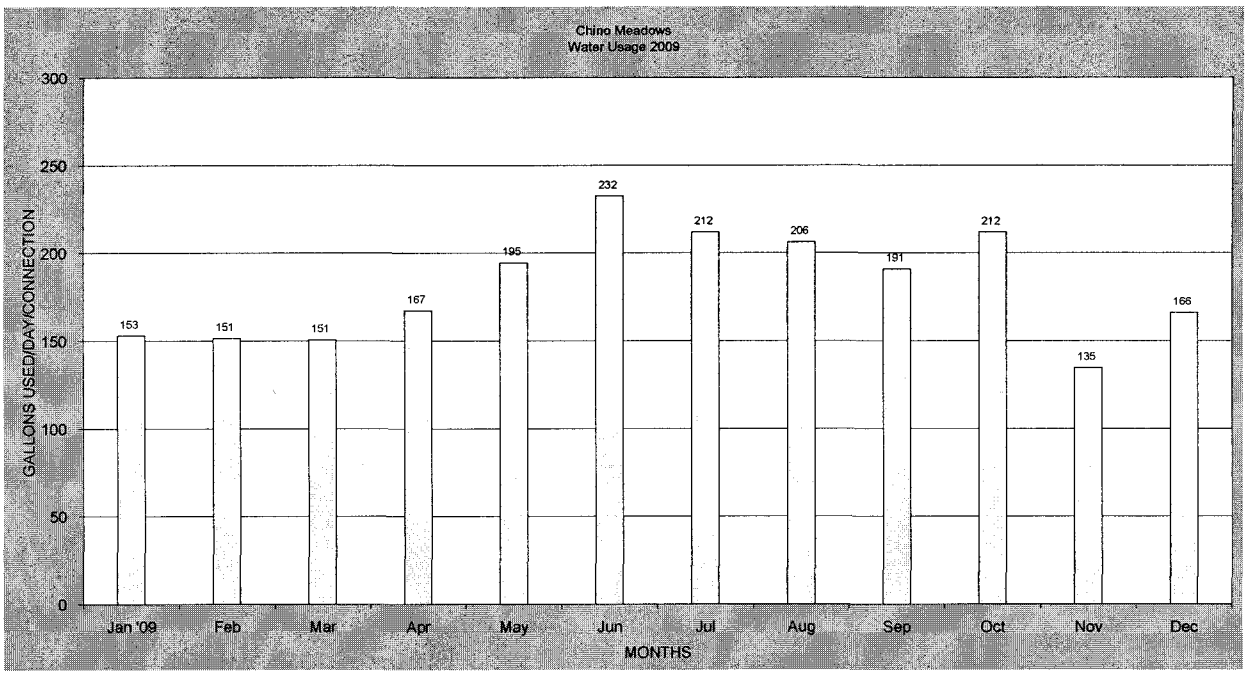
The Company reported a total water testing expense of $4,766 during the test year. Staff reviewed the reported amount and supporting documentation provided by the Company. Staff

recommends the annual water testing expense of $4,766 reported by the Company be used for purposes of this application.[1]

G. WATER USE

Water Sold

Based on information provided by the Company, water use for the year 2009 is presented below. The high monthly domestic water use was 232 gal/day per service connection in June and the low monthly domestic water use was 135 gal/day per service connection in November. The average annual use was 181 gal/day per service connection.



Non-account Water

Non-account water should be 10 percent or less and never more than 15 percent. It is important to be able to reconcile the difference between water sold and the water produced by the source. A water balance will allow a water company to identify water and revenue losses due to leakage, theft, and flushing. The Company reported 64,519,100 gallons pumped and 58,789,200 gallons sold, resulting in a water loss of 8.88 percent for 2009. Non-account water is within acceptable limits.

[1] Company filed water testing expense of $7,062. After Staff reviewed the documentation, Company told Staff they made a mistake. The amount should be $4,766.

Best Management Practices ("BMP") Tariff

The Company does not have an approved BMP tariff. Staff recommends that Chino Meadows be required to file with Docket Control, as a compliance item in this docket, within 90 days of the effective date of this Decision, at least five BMPs in the form of tariffs that substantially conform to the templates created by Staff, available at the Commission's website, for the Commission's review and consideration. A maximum of two of these BMPs may come from the "Public Awareness/Public Relations" or "Education and Training" categories of the BMP's. The Company may request cost recovery of actual costs associated with the BMPs implemented in its next general rate application.

H. GROWTH

In December 2001, Chino Meadows had 680 customers. In December 2007, Chino Meadows's customer base was 901 customers. In December 2010, the Company had 885 customers. In this changing economic climate it is hard for Staff to predict what level of growth is reasonable. The Company estimates that Chino Meadows may lose 10 to 15 customers per year if economic conditions continue. On the other hand, if the economy rebounds from the recession the Company may see a progressive increase in new customers which correlates with a large number of undeveloped residential lots within the company's CC&N. If this were the case, the company may add as many as 84 new customers by 2015.

I. DEPRECIATION RATES

Staff recommends that Chino Meadows use the depreciation rates by individual National Association of Regulatory Utility Commissioners category delineated in Table B of Exhibit JWL.

Table B. Depreciation Rates

NARUC Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
305	Collecting & Impounding Reservoirs	40	2.50
306	Lake, River, Canal Intakes	40	2.50
307	Wells & Springs	30	3.33
308	Infiltration Galleries	15	6.67
309	Raw Water Supply Mains	50	2.00
310	Power Generation Equipment	20	5.00
311	Pumping Equipment	8	12.5
320	Water Treatment Equipment		
320.1	Water Treatment Plants	30	3.33
320.2	Solution Chemical Feeders	5	20.0
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters	12	8.33
335	Hydrants	50	2.00
336	Backflow Prevention Devices	15	6.67
339	Other Plant & Misc Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers & Software	5	20.00
341	Transportation Equipment	5	20.00
342	Stores Equipment	25	4.00
343	Tools, Shop & Garage Equipment	20	5.00
344	Laboratory Equipment	10	10.00
345	Power Operated Equipment	20	5.00
346	Communication Equipment	10	10.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	----	----

NOTES:

1. These depreciation rates represent average expected rates. Water companies may experience different rates due to variations in construction, environment, or the physical and chemical characteristics of the water.

2. Acct. 348, Other Tangible Plant may vary from 5 percent to 50 percent. The depreciation rate would be set in accordance with the specific capital items in this account.

J. CURTAILMENT PLAN AND BACKFLOW PREVENTION TARIFFS

Chino Meadows has approved Curtailment Plan and Backflow Prevention Tariffs on file with the Commission.

K. METER AND SERVICE LINE INSTALLATION CHARGES

The Company has requested to change its service line and meter installation charges. These charges are refundable advances and the Company's proposed charges are within or below Staff's recommended range for these charges. Since the Company may at times install meters on existing service lines, it would be appropriate for some customers to only be charged for the meter installation. Therefore, separate service line and meter charges have been developed by Staff. Staff recommends that the Company proposed charges listed in Table C be adopted.

Table C. Service Line and Meter Installation Charges

Meter Sizes	Current Charges	Company Proposed & Staff Recommended Service Line Charges	Company Proposed & Staff Recommended * Meter Charges	Company Proposed & Staff Recommended Total Charges
5/8" x 3/4"	$335	$406	$95	$501
3/4"	$360	$413	$162	$575
1"	$420	$441	$209	$650
1-1/2"	$540	$395	$321	$716
2"	$660	$727	$845	$1,572
3"	N/A	$952	$1448	$2,400
4"	N/A	$1,310	$2,206	$3,316
6"	N/A	$2,160	$4,756	$6,916

*Note: Meter charge includes meter box or vault.

Chino Meadows II Water Company
Docket No. W-02370A-10-0519

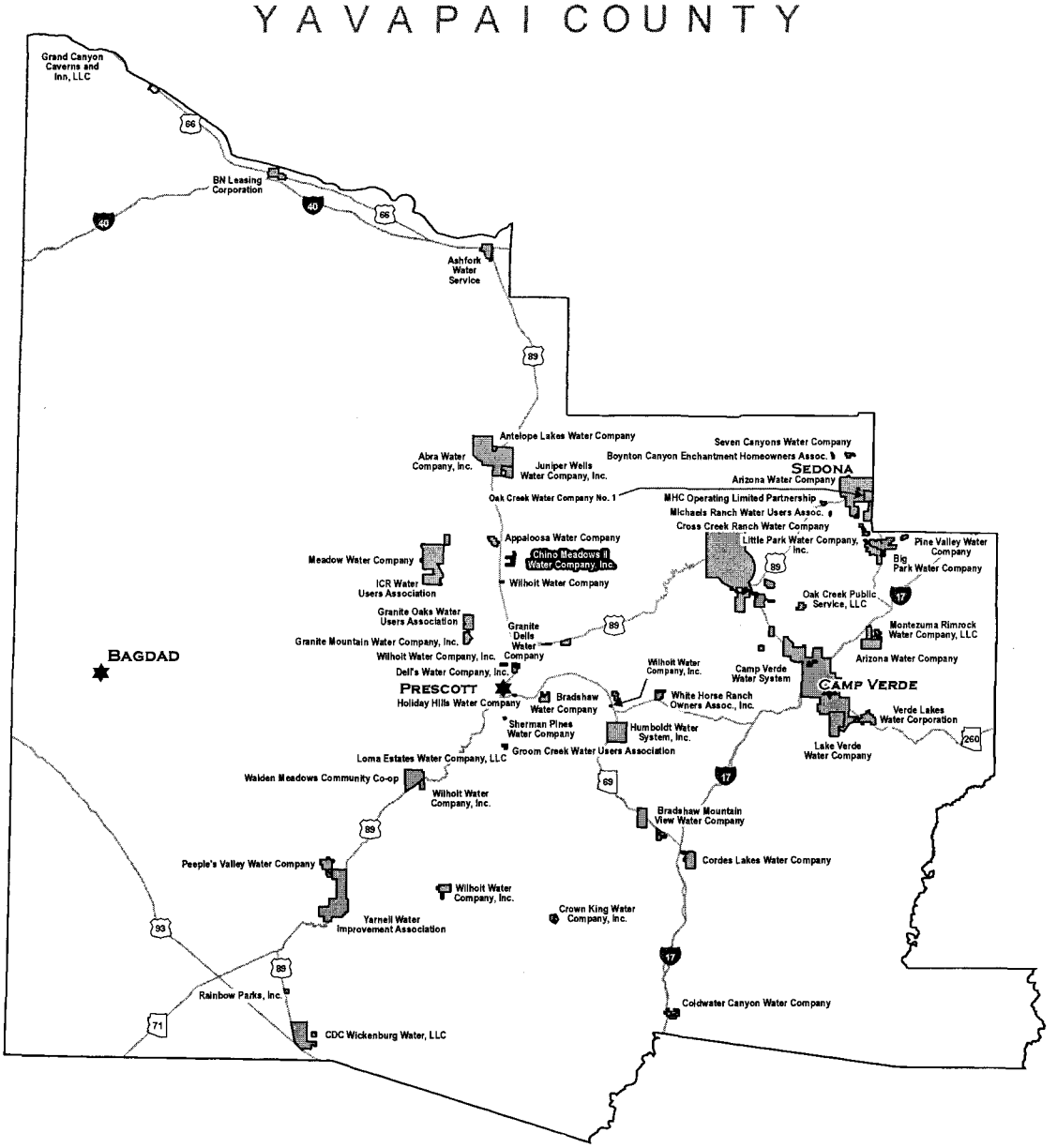


Figure A-1. County Map

Chino Meadows II Water Company
Docket No. W-02370A-10-0519

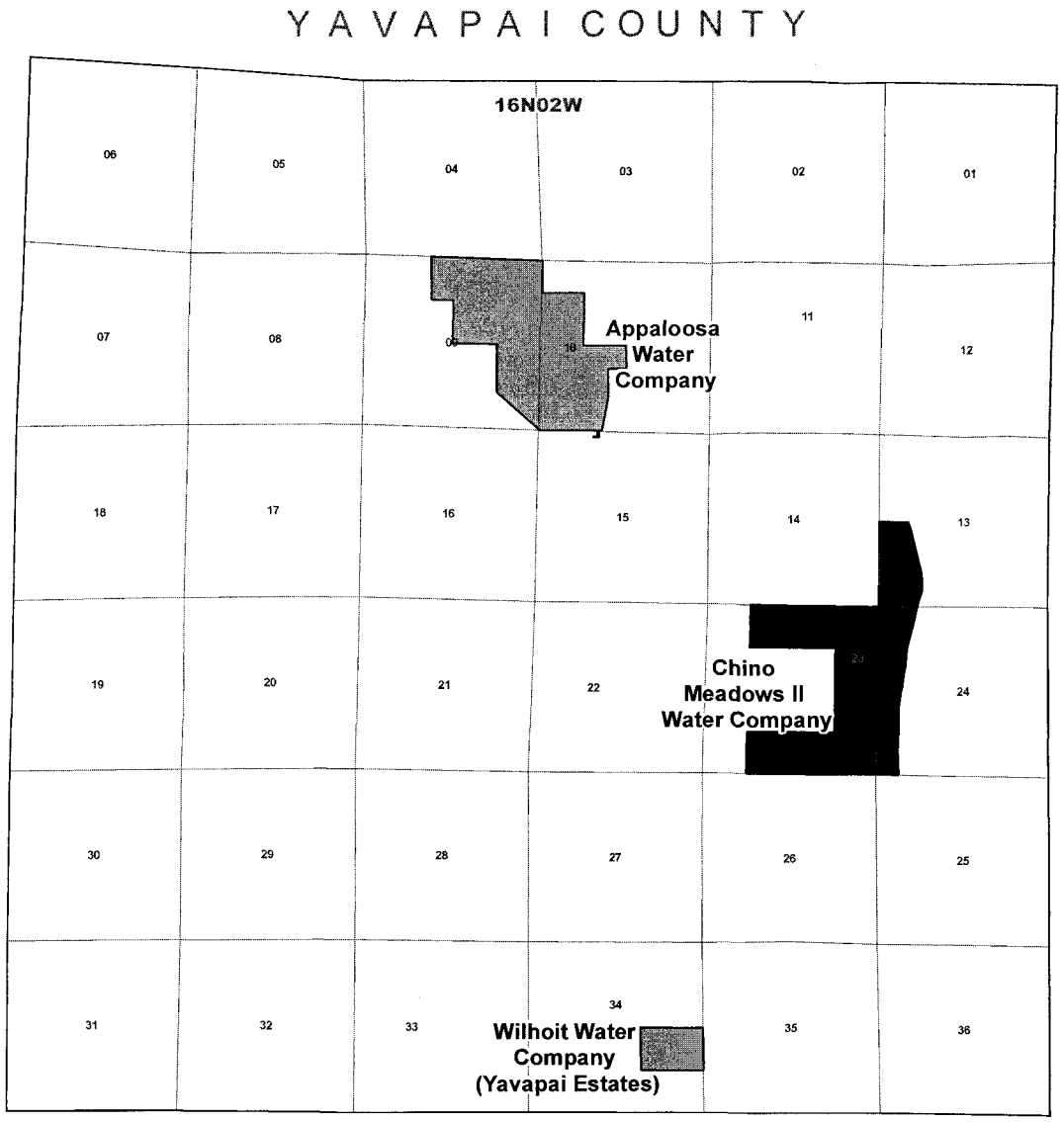


Figure A-2. Certificated Area

BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF CHINO MEADOWS II WATER COMPANY, INC. FOR A RATE INCREASE	))))	DOCKET NO. W-02370A-10-0519

DIRECT

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

AUGUST 8, 2011

TABLE OF CONTENTS

SCHEDULES

EXECUTIVE SUMMARY
CHINO MEADOWS II WATER COMPANY
DOCKET NO. W-02370A-10-0519

Chino Meadows II Water Company ("Chino Meadows" or "Company") is an Arizona public service corporation engaged in providing water utility services to approximately 876 customers within Yavapai County, Arizona. Chino Meadows' current rates were approved in Decision No. 59078, dated May 4, 1995.

The Company proposes an $84,641, or 24.07 percent revenue increase from $351,633 to $436,273. The proposed revenue increase would produce an operating income of $82,318 for a 36.52[1] percent rate of return on an original cost rate base ("OCRB") of $225,397. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280 gallons from $28.98 to $34.80, for an increase of $5.82 or 20.1 percent.

Staff recommends a $21,566, or 6.13 percent revenue decrease from $351,633 to $330,067. Staff's recommended revenue decrease would produce an operating income of $19,813 for a 9.60 percent rate of return on a Staff adjusted OCRB of $206,387 as shown on Schedule CSB-1. Staff's recommended rates would decrease the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280 gallons from $28.98 to $27.29, for a decrease of $1.69 or 5.8 percent.

[1] The rate of return shown on Schedule A-1, line 5 of the Company's application is 10.81 percent. However, this rate when multiplied by the Company's proposed rate base yields an operating income of $24,365 ($225,397 x 10.81%). Staff reflects here the actual rate of return resulting from dividing the Company's proposed operating income by its proposed rate base.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst V.

A. I am responsible for the examination and verification of financial and statistical information included in utility rate applications. In addition, I develop revenue requirements, prepare written reports, testimonies, and schedules that include Staff recommendations to the Commission. I am also responsible for testifying at formal hearings on these matters.

Q. Please describe your educational background and professional experience.

A. I received a Bachelor of Science Degree in Business Administration from the University of Arizona and a Bachelor of Science Degree in Accounting from Arizona State University.

Since joining the Commission in August 1996, I have participated in numerous rate cases and other regulatory proceedings involving electric, gas, water, and wastewater utilities. I have testified on matters involving regulatory accounting and auditing. Additionally, I have attended utility-related seminars sponsored by the National Association of Regulatory Utility Commissioners ("NARUC") on ratemaking and accounting designed to provide continuing and updated education in these areas.

Q. What is the scope of your testimony in this case?

A. I am presenting Staff's analysis and recommendations in the areas of rate base and operating revenues, expenses, and rate design regarding the Chino Meadows II Water Company, Inc.'s ("Chino Meadows" or "Company") application for a permanent rate increase. Staff witness, Juan Manrique, is presenting Staff's cost of capital recommendations. Staff witness, Jian Liu, is presenting Staff's engineering analysis and recommendations.

Q. What is the basis of your recommendations?

A. I performed a regulatory audit of the Company's application to determine whether sufficient, relevant, and reliable evidence exists to support the Company's requested rate increase. The regulatory audit consisted of examining and testing the financial information, accounting records, and other supporting documentation and verifying that the accounting principles applied were in accordance with the Commission-adopted NARUC Uniform System of Accounts ("USOA").

BACKGROUND

Q. Please provide a brief description of Chino Meadows and the service it provides.

A. Chino Meadows is an Arizona public service corporation, serving approximately 876 customers in Yavapai County, Arizona. Chino Meadows' current rates were approved in Decision No. 59078, dated May 4, 1995.

Q. What are the primary reasons for Chino Meadows' requested permanent rate increase?

A. According to Chino Meadows, the primary reason is to recover its operating expenses and to earn a just and reasonable rate of return.

CONSUMER SERVICE

Q. Please provide a brief history of customer complaints received by the Commission regarding Chino Meadows.

A. Staff reviewed the Commission's records and found that, for the year 2007, there were six complaints regarding billing, quality of service, disconnects and/or terminations, and repair issues; for the year 2008, there were two complaints regarding billing and quality of service; and for the years 2009 to 2011, there were no complaints. All complaints have been resolved and closed. In 2011, there was one opinion opposing the instant rate case.

COMPLIANCE

Q. Please provide a summary of the compliance status of Chino Meadows.

A. A check of the Compliance database indicates that there are currently no delinquencies for Chino Meadows.

SUMMARY OF PROPOSED REVENUES

Q. Please summarize the Company's filing.

A. The Company proposes an $84,641, or 24.07 percent revenue increase from $351,633 to $436,273. The proposed revenue increase would produce an operating income of $82,318 for a 36.52[2] percent rate of return on an original cost rate base ("OCRB") of $225,397. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280 gallons from $28.98 to $34.80, for an increase of $5.82 or 20.1 percent.

[2] The rate of return shown on Schedule A-1, line 5 of the Company's application is 10.81 percent. However, this rate when multiplied by the Company's proposed rate base yields an operating income of $24,365 ($225,397 x 10.81%). Staff reflects here the actual rate of return resulting from dividing the Company's proposed operating income by its proposed rate base.

Q. Please summarize Staff's recommended revenue.

A. Staff recommends a $21,566, or 6.13 percent revenue decrease from $351,633 to $330,067. Staff's recommended revenue decrease would produce an operating income of $19,813 for a 9.60 percent rate of return on a Staff adjusted OCRB of $206,387 as shown on Schedule CSB-1. Staff's recommended rates would decrease the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280 gallons from $28.98 to $27.29, for a decrease of $1.69 or 5.8 percent.

Q. What test year did Chino Meadows utilize in this filing?

A. Chino Meadows' rate filing is based on the twelve months ended December 31, 2009 ("test year").

Q. Please summarize Staff's rate base and operating income adjustments for Chino Meadows.

A. My testimony discusses the following adjustments:

Rate Base Adjustments

Advances In Aid of Construction ("AIAC") – This adjustment decreases AIAC by $12,630 to reflect Staff's removal of AIAC that, through the terms of the AIAC agreement, had converted to CIAC after ten years.

Contributions In Aid of Construction ("CIAC") – Staff increased CIAC by $12,630 as the result of transferring the cost of AIAC plant that had converted to CIAC plant to the AIAC account.

Amortization of CIAC – This adjustment increases accumulated amortization of CIAC by $316 to reflect the amortization of CIAC on the Staff-recommended CIAC additions.

Customer Deposits – This adjustment increases the account by $11,330 to reflect test year-end customer deposits.

Cash Working Capital Allowance – This adjustment decreases the account by $7,996 to reflect calculation of the cash working capital allowance using Staff's recommended operating expenses.

Operating Income Adjustments

Salary and Wages, Employees – This adjustment decreases operating expenses by $31,204. Staff's adjustments reflect disallowance of a pro forma salary increase that has not occurred; allocation of a portion of the salary and wage expense to an affiliate; normalization of overtime charges; annualization of a salary increase that took effect in the test year; and inclusion of a salary increase that went into effect after the test year.

Salary and Wages, Officers, Directors, and Stockholders – This adjustment decreases operating expenses by $4,879 to reflect Staff's changes to the number of estimated hours worked.

Contract Services, Legal – This adjustment decreases operating expenses by $2,995 to reflect removal of non-recurring costs related to the sale of the Company and to provide an allowance for a reasonable level of legal expense.

Contract Services, Testing – This adjustment decreases operating expenses by $2,296 to reflect Staff's recommended annual water testing costs.

Transportation Expense – This adjustment decreases operating expenses by $1,582 to reflect Staff's allocation of a portion of this expense to an affiliate.

Insurance, General Liability – This adjustment decreases operating expenses by $3,874 to reflect Staff's allocation of a portion of this expense to an affiliate.

System Support Expense – This adjustment decreases operating expenses by $1,483 to reflect Staff's disallowance of costs that were not incurred in the test year and costs that should be capitalized and depreciated rather than expensed.

Rate Case Expense – This adjustment increases operating expense by $698 to provide for a normalized level of rate case expense.

Miscellaneous Expense – This adjustment decreases operating expenses by $3,486 to remove an expense that was not incurred in the test year and also to remove food, beverage, and similar costs.

Property Tax Expense – This adjustment decreases operating expense by $10,141 to reflect Staff's calculation of the Company's property tax expense.

Payroll Tax Expense – This adjustment decreases operating expense by $1,212. Staff disallowed the pro forma payroll tax increase as it was related to the Company's pro forma salary increase that Staff also disallowed.

Depreciation Expense – This adjustment increases operating expenses by $13,780 to reflect Staff's calculation of depreciation expense based upon Staff's recommended plant balances.

Income Tax Expense – This adjustment increases operating expenses by $9,743 to reflect the income tax obligation on Staff's adjusted test year taxable income.

RATE BASE

Fair Value Rate Base

Q. Did the Company prepare schedules showing the elements of Reconstruction Cost New Rate Base?

A. Yes. However, the Company's reconstructed cost new rate base is the same as its OCRB. Therefore, Chino Meadows proposes that its OCRB be treated as its fair value rate base.

Rate Base – Plant Documentation

Q. Are plant costs required to be supported?

A. Yes. The Arizona Administrative Code R14-2-411(D)(1) states, "Each utility shall keep general and auxiliary accounting records reflecting the cost of its properties . . . and all other accounting and statistical data necessary to give complete and authentic information as to its properties . . ." (emphasis added).

Q. During the audit, did Staff identify plant costs which Chino Meadows did not adequately support?

A. Yes. Chino Meadows did not provide invoices to support $121,189 in plant additions, as shown on Schedule CSB-6, line 28. Source documents are essential records for verifying plant costs. In the absence of supporting documentation, the Company's plant balances cannot be verified.

Q. What does Staff typically recommend for inadequately supported plant?

A. Staff typically recommends that 100 percent of the cost be removed from rate base. It is the Company's responsibility to support its claimed costs. If unsupported costs are not removed, ratepayers are at risk of paying a return on plant values that may be overstated or on plant items that may not exist.

Q. Is Staff recommending that 100 percent of the cost be removed in this case?

A. No, Staff is not.

Q. What is Staff's recommended treatment for the inadequately supported plant in this case?

A. Staff is recommending that all plant costs remain in plant in service with no CIAC offset.

Q. Why is Staff recommending this treatment?

A. There are four reasons Staff is recommending this treatment. First, the Company has operated as a Class D or Class E water utility from the inception of its Certificate of Convenience and Necessity in Decision No. 53420, dated January 20, 1983, until sometime between the years 1995 and 1999 when it reached Class C status. In Staff's experience, many owners of small utilities, including some small Class C water companies, are unsophisticated and unaware of their record keeping responsibilities under the NARUC USOA.

Second, Staff's inspection verified that the plant did exist and costs were not overstated. Third, upon Staff's investigation of the inadequate support, it appears likely that the Company or the Company's prior owners paid for some of the plant. The Company states that the original owner of Chino Meadows II went into receivership. Fourth, the Company has not been in for rates for approximately 15 years.

Q. What would be the impact on the revenue requirement and customers' rates if Staff treated 100 percent of the inadequately-supported plant costs as CIAC?

A. Staff's recommended revenue requirement would decrease by $20,784, from $330,848 to $306,548. The typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280

gallons under the Staff recommended rates would decrease by approximately $1.93, from 27.29 to $25.36. The typical median bill under current rates is $28.98.

Q. Will Staff continue to make the same recommendation for inadequately-supported plant costs in the Company's future rate cases?

A. No. Staff is putting the Company on notice that invoices and canceled checks will be needed to support plant additions for the Company's future rate cases.

Rate Base Summary

Q. Please summarize Staff's adjustments to Chino Meadows' rate base shown on Schedules CSB-3 and CSB-4.

A. Staff's adjustments to Chino Meadows' rate base resulted in a net decrease of $19,010, from $225,397 to $206,387. This decrease was primarily due to Staff's recognition of customer deposits.

Rate Base Adjustment No. 1 – AIAC

Q. Did Staff identify AIAC that, through the terms of the related main line extension agreements, had converted to CIAC after ten years?

A. Yes. Based on the Company's response to data request CSB 1-9, Staff identified five AIAC agreements signed in the year 1999 that, according to the terms of the main line extension agreements, had converted to CIAC after ten years. A listing of the agreements is shown on Schedule CSB-5.

Q. What is the amount of AIAC to be removed and reclassified as CIAC?

A. The amount of the AIAC to be removed and reclassified as CIAC is $12,630.

Q. What is Staff recommending?

A. Staff recommends decreasing AIAC by $12,630 as shown on Schedules CSB-4 and CSB-5.

Rate Base Adjustment No. 2 – CIAC

Q. What did the Company propose for CIAC?

A. The Company proposed $12,809 for CIAC.

Q. Did Staff identify AIAC that, through the terms of the related main line extension agreements, had converted to CIAC after ten years?

A. Yes. As previously discussed in Rate Base Adjustment No. 1, "AIAC," Staff identified $12,630 in AIAC that should be converted to CIAC.

Q. What is Staff's recommendation for the CIAC account regarding the AIAC that should be converted to CIAC?

A. Staff recommends increasing CIAC by $12,630, as shown on Schedules CSB-4 and CSB-6.

Rate Base Adjustment No. 3 – Amortization of CIAC

Q. Did Staff make any adjustments to the Amortization of CIAC account?

A. Yes.

Q. What was the adjustment?

A. Staff reflected the amortization of CIAC on the Staff recommended CIAC additions.

Q. What is Staff recommending?

A. Staff recommends increasing the amortization of CIAC by $316, as shown on Schedules CSB-4 and CSB-7.

Rate Base Adjustment No. 4 – Customer Deposits

Q. Is Chino Meadows proposing to include customer deposits in the rate base calculation?

A. No, it is not.

Q. Are customer deposits normally treated as a reduction to rate base?

A. Yes. Customer deposits are a reduction in the calculation of rate base.

Q. Why are customer deposits normally a reduction to rate base?

A. Customer deposits are a reduction to rate base in order to recognize customer-provided capital.

Q. What was the Company's customer deposit balance at the end of the test year?

A. The Company's customer deposit balance was $11,330 at the end of the test year.

Q. What is Staff recommending?

A. Staff recommends increasing customer deposits by $11,330 to reflect the test year-end customer deposit balance in rate base as shown on Schedules CSB-4 and CSB-8.

Rate Base Adjustment No. 5 – Cash Working Capital Allowance

Q. What is cash working capital?

A. Cash working capital is a component of rate base that can be positive or negative. It represents funds provided by the investor for the purpose of paying operating expenses in advance of receiving recovery of such expenses from customers through rates.

Q. How did Chino Meadows calculate the cash working capital it proposes to include in rate base?

A. Chino Meadows calculated cash working capital using the "formula method" which is equal to one-eighth of the operating expenses less depreciation, taxes, purchased water, and purchased pumping power expense, plus one twenty-fourth of purchased water and purchased pumping power expense.

Q. What are the problems inherent in using the formula methodology?

A. It always yields a positive result, effectively ignoring cash working capital provided by rate payers.

Q. What method provides a more accurate measurement of the Company's cash working capital?

A. The lead-lag method is recognized as the most accurate measure of cash working capital.

Q. Is Staff requiring Chino Meadow to use a lead-lag study to support its cash working capital in this rate case?

A. No, Staff is not.

Q. Why is Staff not recommending that Chino Meadows provide a lead-lag study to support its cash working capital in this rate case?

A. The Company has operated as a Class D or Class E water utility from the inception of its Certificate of Convenience and Necessity in Decision No. 53420, dated January 20, 1983, until sometime between the years 1995 and 1999 when it reached Class C status. Further, the Company has not been in for rates for approximately 15 years and likely did not know that a lead-lag study is needed to support working capital for Class C utilities.

Q. Will Staff continue to recommend the calculation of cash working capital using the formula method in the Company's future rate cases?

A. No. Staff is putting the Company on notice that a lead-lag study will be needed as support for any cash working capital for the Company's future rate cases.

Q. What is Staff's recommendation for Chino Meadows's cash working capital allowance?

A. Staff recommends decreasing the account by $7,996 to reflect calculation of the cash working capital allowance using Staff's recommended operating expenses, as shown on Schedules CSB-4 and CSB-9.

Operating Income

Operating Income Summary

Q. What are the results of Staff's analysis of test year revenues, expenses and operating income?

A. As shown on Schedules CSB-10 and CSB-11, Staff's analysis resulted in test year revenues of $351,633, expenses of $314,980 and operating income of $36,653.

Operating Income Adjustment No. 1 – Salaries and Wages, Employees

Q. What is the Company proposing for employee salary and wages expense?

A. The Company is proposing $126,312. The amount is composed of $115,912 for the actual test year employee salary and wages expense and a $10,400 pro forma adjustment to reflect a salary increase that has not been implemented.

Q. Did Staff make any adjustments to the employee salary and wages expense?

A. Yes, Staff made six adjustments as shown on Schedule CSB-12. Staff will discuss each separately.

Allocate $19,563 in Employee Salary and Wage Expense to Regulated Affiliate

Q. Who are the owners of Chino Meadows II?

A. Mr. and Mrs. Paul and Rae Levie.

Q. In addition to Chino Meadows, do Mr. and Mrs. Levie own any other regulated utilities?

A. Yes. Mr. and Mrs. Levie own Granite Mountain Water Company, Inc. ("Granite Mountain") and Antelope Lakes Water Company, Inc. ("Antelope Lakes").

Q. Is the direct labor for Granite Mountain and Antelope Lakes provided by the Chino Meadows employees?

A. Yes.

Q. Is the direct labor of the Chino Meadows employees charged to Granite Mountain and Antelope Lakes when work is performed for Granite Mountain and Antelope Lakes?

A. No, it is not. The Company indicated in response to Data Request CSB 1-32 that all of the employee labor expense is recorded on the books of Chino Meadows because most of the work is performed for Chino Meadows. Also, Chino Meadows has the largest number of customers. During the test year, Chino Meadows had approximately 876 customers, Granite Mountain had approximately 98 customers, and Antelope Lakes had two customers.

Q. Should the labor expense incurred for Granite Mountain and Antelope Lakes be directly charged to Granite Mountain and Antelope Lakes?

A. Yes. The NARUC Guidelines for Cost Allocation and Affiliate Transactions require that the costs primarily attributable to a business operation should be, to the extent appropriate, directly assigned to that business operation.

Q. Can the Company provide support for the actual amount of labor expense that was directly incurred for Granite Mountain and Antelope Lakes?

A. No, because the employees do not maintain time sheets that document the amount of time they spend working for each utility.

Q. What amount of labor expense does Staff recommend allocating to Granite Mountain?

A. Staff recommends allocating $19,563 to Granite Mountain.

Q. What is the basis of Staff's recommendation?

A. In Granite Mountain's last rate case (Docket No. W-02467A-09-0333), Granite Mountain did not include salary and wage expense in its total operating expenses; however, Staff recommended $19,563. The amount was adopted by the Commission in Decision No. 71869 dated August 31, 2010 (p. 21, line 24). Therefore, Staff concluded that it was appropriate to remove the $19,563 from Chino Meadows' proposed $126,312 in salary and wage expense, as a part of the $126,312 was labor expense incurred for Granite Mountain.

Q. What amount of labor expense does Staff recommend allocating to Antelope Lakes?

A. Staff recommends no allocation be made to Antelope Lakes at this time.

Q. What is the basis of Staff's recommendation?

A. During the test year, Antelope Lakes had two customers. However, Chino Meadows has informed Staff that Antelope Lakes currently has no customers.

Q. What is Staff's recommendation concerning salary and wage expense to be allocated to regulated affiliates?

A. Staff recommends decreasing salary and wage expense by $19,563 to reflect Staff's recommended allocation to Granite Mountain, as shown on Schedule CSB-12.

Remove $10,400 Pro Forma Salary and Wage Increase

Q. What amount is Chino Meadows proposing for employee salaries and wage expense?

A. Chino Meadows is proposing $126,312 for employee salaries and wages expense. The amount is composed of $115,912 for actual test year expense and a $10,400 pro forma salary increase.

Q. Did the entire $10,400 pro forma salary increase go into effect during the test year or in the year following the test year?

A. No, it did not.[3]

Q. Is the $10,400 pro forma salary and wage increase a part of a union negotiated contract?

A. No, it is not.

Q. Is the Company's pro forma adjustment appropriate?

A. No, the Company's pro forma adjustment is not appropriate. The Company's test year is December 31, 2009, and the Company has not implemented the $10,400 pro forma salary increase as of July 2011, more than 16 months after the test year. Further, the increase was not the result of an independent third party legal contractual obligation such as a union negotiated contract.

Q. What is Staff's recommendation concerning the $10,400 pro forma salary and wage increase adjustment?

A. Staff recommends decreasing employee salary and wage expense by $10,400 to reflect Staff's disallowance of the pro forma adjustment, as shown on Schedule CSB-13.

Reflect Actual Salary and Wage Increase Effective February 8, 2010

Q. Did Chino Meadows give an employee a salary and wage increase in February 2010?

A. Yes.

[3] Staff notes that one employee received a salary and wage increase in April of the test year and one employee received an increase the year following the test year. Staff discusses these adjustments later in its testimony.

Q. What was the amount of the increase?

A. The amount was one dollar per hour or $2,080 per year, as shown on Schedule CSB-12.

Q. What is Staff's recommendation regarding the employee salary and wage increase effective February 8, 2010?

A. Staff recommends increasing salary and wage expense by $2,080, as shown on Schedule CSB-12.

Annualize Actual Salary and Wage Increase Effective April 1, 2009

Q. Did Chino Meadows give an employee a salary and wage increase in April 2009?

A. Yes.

Q. What was the amount of the increase?

A. The amount was two dollars per hour.

Q. Did Staff annualize the increase?

A. Yes, Staff reflected three additional months of salary increase (i.e. January, February, and March). Staff's calculation is (2,080 hrs / 12 months) x 3 months x $2 = $1,040.

Q. What is Staff's recommendation regarding the employee salary and wage increase effective April 1, 2009?

A. Staff recommends increasing salary and wage expense by $1,040, as shown on Schedule CSB-12.

Normalize Overtime Charges

Q. What were Chino Meadows' overtime charges for the years 2007, 2008, and 2009?

A. The overtime charges were $1,575, $3,798, and $6,828 for the years 2007, 2008, and 2009, respectively.

Q. How do the overtime charges for 2009 compare to the previous two years?

A. The charges were significantly higher. The wide fluctuations from year to year indicate overtime hours that were needed in some years but not in others.

Q. Did Staff normalize the 2009 overtime charges?

A. Yes, Staff normalized the overtime charges using three years, as shown on Schedule CSB-12.

Q. How does including abnormally high costs in operating expenses harm customers?

A. It harms customers because, on average, the rates would be over-stated as the Company would not be incurring the abnormally high level of overtime expense every year.

Q. What is Staff's recommendation regarding the overtime charges?

A. Staff recommends decreasing salary and wage expense by $2,761, as shown on Schedule CSB-12.

Remove Bonuses

Q. Were bonuses included in the Chino Meadows' employee salary and wage expense?

A. Yes.

Q. What was the amount of bonuses?

A. According to the Company's general ledger account no. 6601.00, $1,600 was included.

Q. Are the payment of bonuses necessary to the provision of water service?

A. No, the cost of bonuses are not necessary to provision of service. Chino Meadows pays its employees a competitive salary, wage and benefits package with periodic annual wage increases. These costs are designed to compensate the employees to perform work that will enable the Company to provide adequate service. Therefore, the cost of the employees' base salaries and wages is a required cost. Bonuses are an optional cost and, therefore, should be recognized below-the-line (i.e., removed from rates).

Q. What is Staff's recommendation regarding the bonuses?

A. Staff recommends decreasing salary and wage expense by $1,600 to remove the bonuses, as shown on Schedule CSB-12.

Operating Income Adjustment No. 2 – Salaries and Wages, Officers, Directors, and Stockholders

Q. What is the Company proposing for stockholder salary and wages expense?

A. The Company is proposing $35,498.

Q. What stockholder receives the salary and wage?

A. Mr. Paul D. Levie.

Q. How many businesses does Mr. Levie operate from his office located at 2465 Shane Drive in Prescott, Arizona?

A. According to data request response CSB 4-7, Mr. Levie operates nine businesses. Those businesses are: Chino Meadows, Granite Mountain, Antelope Lakes; City of Prescott.com, LLC; Equestrian Constuction, LLC; Equestrian Development Corporation; LL&M Development LLC; Levie-Antelope Lakes Development, Inc.; and Paul D. Levie, P.C.

Q. Does Mr. Levie maintain a time sheet showing the number of hours per day spent working on each of his nine businesses?

A. No. Mr. Levie does not maintain time sheets that document the amount of time he spends each day working for each of his nine businesses.

Q. Did the Company provide a time study and the underlying documentation to support the $35,498?

A. No, it did not.

Q. Did Staff request that the Company provide a description of Mr. Levie's work and the estimated amount of time he spends working for Chino Meadows?

A. Yes.

Q. What are Mr. Levie's duties as described by Chino Meadows?

A. The duties are: supervision and management of company personnel; review of fiduciary responsibilities including accounts payable and accounts receivable; review of payroll; signing checks for payroll and accounts payable; meeting with Company management to address concerns, equipment repair and/or water plant facilities; project management; acquire, regulate, and oversee company loans and long-term debts; ensuring that proper equipment and procedures are in place to adequately supply drinking water; and review and advise Company on manuals such as employee handbook and emergency response manual.

Q. What amount of time did the Company estimate that Mr. Levie spends working for Chino Meadows?

A. The Company estimated that Mr. Levie spends 80 hours per month working for Chino Meadows.

Q. Did Staff make any adjustments to the number of hours?

A. Yes. Staff reviewed the number of hours and given that (1) nine businesses are operated from the office, (2) no time sheets were maintained and no time study was conducted, (3) some of the duties appeared to be related to capital projects, (4) some of the duties appeared to duplicate the duties of another employee at the office and (5) some of the time estimated for particular tasks appeared high, Staff reduced the total number of hours from 80 to 69. Staff's estimate of time for each duty is shown on Schedule CSB-14, column E.

Q. What is Staff's recommendation?

A. Staff recommends decreasing stockholder salary and wages expense by $4,879, as shown on Schedules CSB-11 and CSB-13. Further, Staff recommends that Chino Meadows have available a time study (and underlying detailed time sheets) to evidence the amount of direct labor hours that Mr. Levie spends on activities related to Chino Meadows for recovery of that expense in future rate cases.

Operating Income Adjustment No. 3 – Contract Services, Legal

Q. What did the Company propose for contract services, legal?

A. The Company proposed $3,995 for contract services, legal. The costs were related to the potential sale of the Company.

Q. What adjustment did Staff make?

A. Staff removed the $3,995 as it was not needed in the provision of service. Further, Staff added $1,000 to provide a reasonable level of on-going legal costs related to Chino Meadows operations.

Q. What is Staff's recommendation?

A. Staff recommends decreasing contract services, legal expense by $2,995, as shown on Schedules CSB-11 and CSB-14.

Operating Income Adjustment No. 4 – Contract Services, Testing

Q. What did the Company propose for water testing expense?

A. The Company proposed $7,062 for water testing expense. The amount is composed of $4,766 for actual test year expense and a $2,296 proforma adjustment.

Q. What adjustment did Staff make?

A. Staff adjusted annual water testing costs to reflect Staff's recommended $4,766 water testing expense as discussed in greater detail by Staff witness Jian Liu.

Q. What is Staff's recommendation?

A. Staff recommends decreasing water testing expense by $2,296 as shown on Schedules CSB-11 and CSB-15.

Operating Income Adjustment No. 5 – Transportation Expense

Q. What did the Company propose for transportation expense?

A. The Company proposed $15,726 for transportation expense.

Q. Should a portion of the $15,726 in transportation expense be allocated to Granite Mountain?

A. Yes. Staff spoke to a representative of the Company and found that Chino Meadows vehicles are used to read the meters of Granite Mountain's customers.

Q. How did Staff allocate the expense?

A. Since the Company indicated that the vehicles were only used to read Granite Mountain's customers' meters, Staff allocated the expense on a single factor, customer count.

Q. What amount did Staff allocate to Granite Mountain?

A. Staff allocated $1,582 to Granite Mountain.

Q. What is Staff's recommendation?

A. Staff recommends decreasing transportation expense by $1,582 to remove transportation expense that was incurred for Granite Mountain, as shown on Schedules CSB-11 and CSB-16.

Operating Income Adjustment No. 6 – Insurance, General Liability

Q. What did the Company propose for general liability insurance?

A. The Company proposed $11,848 for general liability insurance.

Q. Should a portion of the $11,848 in general liability expense be allocated to Granite Mountain?

A. Yes. In response to data request CSB 1-27, the Company indicated that both Granite Mountain and Chino Meadows are covered by the insurance policy, but Chino Meadows paid the entire insurance premium during the test year.

Q. How did Staff allocate the expense?

A. Staff allocated the expense using two factors, plant values and customer counts, as shown on Schedule CSB-17.

Q. What is Staff's recommendation?

A. Staff recommends decreasing general liability insurance by $3,874, as shown on Schedules CSB-11 and CSB-17.

Operating Income Adjustment No. 7 – System Support Expense

Q. What guidance should companies use in determining whether a cost should be capitalized by recording it in a plant account or treated as an operating expense?

A. The Arizona Administrative Code R14-2-411 (D) (2) requires water companies to maintain their accounting records in accordance with the NARUC USOA. It states that "[e]ach utility shall maintain its books and records in conformity with the Uniform System of Accounts for Class A, B, C and D Water Utilities" (emphasis added).

Q. Did Chino Meadows make a pro forma adjustment to expense software and computer costs that, according to the NARUC USOA, should be recorded in plant accounts?

A. Yes, the Company made a $1,483 pro forma adjustment to the system support expense account for software and equipment that will enable customers to use their debit or credit cards to pay their water bills. This type of cost should be included in account no. 340, office furniture and equipment.

Q. What is the effect of expensing plant?

A. The matching principle is violated. The NARUC USOA requires utilities to follow accrual accounting. The matching principle is the underlying basis of accrual accounting. The matching principle requires that revenues in an accounting period be matched to the expenses incurred during that same accounting period.

The practice of expensing plant violates the matching principle because the entire cost of the asset is matched to only one accounting period, even though the asset will benefit many accounting periods. Adherence to the matching principle and the NARUC USOA requires that the cost of an asset that benefits more than one accounting period be capitalized (by recording it in a plant account) and depreciated over the asset's useful life.

Q. Is the Company-proposed $1,483 pro forma adjustment based upon historical cost?

A. No, it is not. The Company has not purchased the software and equipment. Arizona Administrative Code R14-2-103(A)(3)(p) requires that test year expenses be based on historical cost.

Q. What is Staff's recommendation?

A. Staff recommends decreasing the system support expense account by $1,483 to remove pro forma costs that were not incurred in the test year and should be capitalized and depreciated, as shown on Schedules CSB-11 and CSB-18.

Operating Income Adjustment No. 8 – Rate Case Expense

Q. What annual amount of rate case expense did the Company propose?

A. The Company proposed $442 for annual rate case expense.

Q. What amount of total rate case expense has the Company incurred?

A. The Company has incurred $5,100 to date and expects to incur an additional $600 by the time a decision is issued in this proceeding.

Q. Is total rate case expense of $5,700 reasonable for the Company?

A. Yes.

Q. What number of years did Staff use to normalize rate case expense?

A. Staff usually normalizes rate case expense over a 3 to 5 year period. Since there was approximately 15 years between the Company's last rate case and the instant case, Staff recommends five years.

Q. What is Staff's recommendation?

A. Staff recommends increasing rate case expense by $698, as shown on Schedules CSB-11 and CSB-19.

Operating Income Adjustment No. 9 – Miscellaneous Expense

Q. What did the Company propose for miscellaneous expense?

A. The Company proposed $4,089 for miscellaneous expense.

Q. What amount for food, beverages, and similar costs did Chino Meadows include in the cost of service?

A. Chino Meadows included $2,249 for food, beverages, and similar costs, as shown on Schedule CSB-20.

Q. What rate-making treatment does Staff recommend for these types of expenses?

A. Since these costs are not necessary to provide service, Staff recommends that they be recognized as non-operating expenses and recognized below the line (i.e. excluded from the rates).

Q. Did Staff make any other adjustment?

A. Yes. Staff removed $1,237 in costs that were not incurred in the test year. The costs were related to outstanding payments from an old bank account with National Bank of Arizona.

Q. What is Staff's recommendation?

A. Staff recommends decreasing miscellaneous expense by $3,486, as shown on Schedules CSB-11 and CSB-20.

Operating Income Adjustment No. 10 – Property Taxes

Q. What is Chino Meadows proposing for property taxes?

A. Chino Meadows is proposing $22,329 for property taxes.

Q. Did Staff make any adjustment to the property taxes?

A. Yes. Staff's adjustment reflects Staff's calculation of the property tax expense using the modified Arizona Department of Revenue Methodology applied to Staff's recommended revenues, as shown on Schedule CSB-21.

Q. What is Staff's recommendation?

A. Staff recommends decreasing property tax expense by $10,141, as shown on Schedules CSB-11 and CSB-21.

Operating Income Adjustment No. 11 – Payroll Taxes

Q. What did the Company propose for payroll taxes?

A. The Company proposed $10,804 for payroll tax expense. The amount is composed of $9,592 for actual test year expense and a $1,212 pro forma payroll tax increase.

Q. Is the $1,212 pro forma payroll tax increase related to the $10,400 pro forma salary increase discussed in Operating Income Adj. No. 1?

A. Yes.

Q. Did Staff disallow the $10,400 pro forma salary increase discussed in Operating Income Adj. No. 1?

A. Yes and accordingly, Staff is recommending disallowance of the related pro forma payroll tax increase.

Q. What is Staff's recommendation?

A. Staff recommends decreasing payroll tax expense by $1,212, as shown on Schedules CSB-11 and CSB-22.

Operating Income Adjustment No. 12 – Depreciation Expense

Q. What is Chino Meadows proposing for depreciation expense?

A. Chino Meadows is proposing depreciation expense of $25,132.

Q. What adjustment did Staff make to depreciation expense?

A. Staff adjusted depreciation expense to reflect application of the Staff recommended depreciation rates to the Staff recommended plant balances.

Q. What is Staff recommending?

A. Staff recommends increasing depreciation expense by $13,780, as shown on Schedules CSB-11 and CSB-23.

Operating Income Adjustment No. 13 – Income Taxes

Q. What is Chino Meadows proposing for test year income tax expense?

A. Chino Meadows is proposing a negative $45 for income taxes.

Q. Did Staff make any adjustments to test year income tax expense?

A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon Staff's adjusted test year taxable income.

Q. What is Staff's recommendation?

A. Staff recommends increasing income tax expense by $9,743, as shown on Schedules CSB-11 and CSB-24.

RATE DESIGN

Q. Has Staff prepared a schedule summarizing the current, Company proposed, and Staff recommended rates and service charges?

A. Yes. Schedule CSB-25 provides a summary of the Company's current, Company's proposed, and Staff's recommended rates.

Q. Please summarize the current rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include 1,000 gallons. One commodity rate applies to all usage.

Q. Please summarize the Company's proposed rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include 1,000 gallons. The commodity rates are based on an inverted three-tier rate design. The Company's proposed rates would increase the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280 gallons from $28.98 to $34.80, for an increase of $5.82 or 20.1 percent, as shown on Schedule CSB-26.

Q. Please summarize Staff's recommended rate design.

A. Customer class is distinguished by meter size. The monthly minimum charges vary by meter size and include no gallons. The commodity rates are based on an inverted three tier rate design. Staff's recommended rates would decrease the typical residential 5/8 x 3/4-inch meter bill with a median usage of 4,280 gallons from $28.98 to $27.29, for a decrease of $1.69 or 5.8 percent, as shown on Schedule CSB-26.

Q. Did the Company propose any changes to its Meter and Service Line Charges?

A. Yes, and Staff recommends approval. Both the Company-proposed and the Staff-recommended changes are shown on Schedule CSB-26 and are discussed in greater detail in the testimony of Staff witness, Jian Liu.

Service Charges

Q. Did the Company propose any changes to the service charges?

A. Yes. The Company proposes to increase the Establishment charge from $15 to $25; increase the Establishment (After Hours) charge from $30 to $35; increase the Reconnection (Delinquent) charge from $22 to $35; add a Reconnection (Delinquent) After Hours charge of $45; increase the Meter Test if correct from $15 to $35; increase the Insufficient Funds ("NSF") Check charge from $15 to $20; decrease the Deferred Payment charge from 1.5 percent to 1.0 percent; increase the Meter Re-Read charge from $12 to $15; and to add a Deferred Payment charge of 1.5 percent per month.

Q. Does Staff agree with the proposed Establishment (After Hours) Charge and the Reconnection (Delinquent) After Hours Charge?

A. No, Staff does not. Staff agrees that an additional fee for service provided after normal business hours is appropriate when such service is at the customer's request or for the

customer's convenience. Such a tariff compensates the utility for additional expenses incurred from providing after-hours service.

Moreover, Staff concludes that it is appropriate to apply an after-hours service charge in addition to the charge for any utility service provided after hours at the customer's request or for the customer's convenience. Therefore, Staff recommends elimination of the Company's current Establishment (After Hours) charge and denial of the proposed Reconnection (Delinquent) After Hours charge. Instead of these charges, Staff recommends the creation of a separate $25 after-hours service charge. For example, under Staff's proposal, a customer would be subject to a $25 Establishment fee if it is done during normal business hours, but would pay an additional $25 after-hours fee if the customer requested that the establishment be done after normal business hours.

Q. Does Staff agree with the proposed Reconnection (Delinquent) Hours charge?

A. No, Staff does not. The Company is proposing to increase the Reconnection (delinquent) charge from $22.00 to $35.00. Staff recommends a $30.00 Reconnection (delinquent) charge as it is within the range of the amounts that other utilities in the area charge for this service.

Q. Does Staff agree with the proposed Meter Test charge?

A. No, Staff does not. The Company is proposing to increase the Meter Test charge from $15.00 to $35.00. Staff recommends a $20.00 Meter Test charge as it is within the range of the amounts that other utilities in the area charge for this service.

Q. Does Staff agree with the proposed Deferred Payment charge?

A. No, Staff does not. The Company proposed to decrease the charge from one and a half percent to one percent. One percent is not consistent with the Commission Rules, therefore Staff recommends denial.

Q. Does Staff agree with the Company-proprosed Establishment, NSF Check, and Meter Re-Read Charges?

A. Yes.

Fire Sprinkler Charges

Q. Did Staff recommend the addition of fire sprinkler charges?

A. Yes. The Company currently does not have tariffed rates for fire sprinklers. In the event that a customer requests service for a fire sprinkler, Staff recommends charges for fire sprinklers for various meter sizes as shown on Schedule CSB-26.

Q. Does this conclude your Direct Testimony?

A. Yes, it does.

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-1

REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	[A] COMPANY ORIGINAL COST	[B] STAFF ORIGINAL COST
1	Adjusted Rate Base	$ 225,397	$ 206,387
2	Adjusted Operating Income (Loss) After Income Taxes	$ (2,278)	$ 36,653
3	Current Rate of Return (L2 / L1)	-1.01%	17.76%
4	Required Rate of Return	10.81%	9.60%
5	Required Operating Income (L4 * L1)[1]	$ 82,318 [1]	$ 19,813
6	Operating Income Deficiency/(Excess) (L5 - L2)[2]	$ 88,912 [2]	$ (16,840)
7	Gross Revenue Conversion Factor	1.36990	1.28063
8	Increase (Decrease) In Gross Revenue (L7 * L6)[3]	$ 84,641 [3]	$ (21,566)
9	Adjusted Test Year Revenue	$ 351,633	$ 351,633
10	Proposed Annual Revenue (L8 + L9)[4]	$ 436,273 [4]	$ 330,067
11	Required Increase/(Decrease in Revenue) (%) (L8/L9)	24.07%	-6.13%

Footnotes
[1] The Company's Required Operating Income is not equal to L4 * L1

[2] Company's Required Operating Income Deficiency is not equal to L5 - L2

[3] The Company's Increase In Gross Revenue is not equal to L7 * L6

[4] The Company's Proposed Annual Revenue is not equal to L8 + L9

References:
Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-11

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-2

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
2	Uncollecible Factor (Line 11)	0.0000%			
3	Revenues (L1 - L2)	100.0000%			
4	Combined Federal and State Income Tax and Property Tax Rate (Line 23)	21.9136%			
5	Subtotal (L3 - L4)	78.0864%			
6	**Revenue Conversion Factor (L1 / L5)**	1.280633			
	Calculation of Uncollecttible Factor:				
7	Unity	100.0000%			
8	Combined Federal and State Tax Rate (Line 17)	20.9228%			
9	One Minus Combined Income Tax Rate (L7 - L8)	79.0772%			
10	Uncollectible Rate	0.0000%			
11	Uncollectible Factor (L9 * L10)	0.0000%			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
13	Arizona State Income Tax Rate	6.9680%			
14	Federal Taxable Income (L12 - L13)	93.0320%			
15	Applicable Federal Income Tax Rate (Line 53)	15.0000%			
16	Effective Federal Income Tax Rate (L14 x L15)	13.9548%			
17	Combined Federal and State Income Tax Rate (L13 +L16)		20.9228%		
	Calculation of Effective Property Tax Factor				
18	Unity	100.0000%			
19	Combined Federal and State Income Tax Rate (L17)	20.9228%			
20	One Minus Combined Income Tax Rate (L18-L19)	79.0772%			
21	Property Tax Factor (CSB-20, Col B, L24)	1.2530%			
22	Effective Property Tax Factor (L20*L21)		0.9908%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)				21.9136%
24	Required Operating Income (Schedule CSB-1, Line 5)	$ 19,813			
25	AdjustedTest Year Operating Income (Loss) (Sch CSB-11, Col C, Line 34)	36,653			
26	Required Increase in Operating Income (L24 - L25)		$ (16,840)		
27	Income Taxes on Recommended Revenue (Col. [C], L52)	$ 5,242			
28	Income Taxes on Test Year Revenue (Col. [A], L52)	9,698			
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		(4,456)		
30	Recommended Revenue Requirement (Schedule CSB-1, Line 10)	$ 330,067			
31	Uncollectible Rate (Line 10)	0.0000%			
32	Uncolllectible Expense on Recommended Revenue (L30*L31)	$ -			
33	Adjusted Test Year Uncollectible Expense	$ -			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue (CSB-20, Col B, L19)	$ 11,917			
36	Property Tax on Test Year Revenue (CSB-20, Col A, L16)	12,187			
37	Increase in Property Tax Due to Increase in Revenue (L35-L36)		(270)		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)		$ (21,566)		

		Test Year		Staff Recommended
	Calculation of Income Tax:			
39	Revenue (Schedule CSB-11, Col. [C], Line 4 & Sch. CSB-1, Col. [D] Line 1	$ 351,633	$ (21,566)	$ 330,067
40	Operating Expenses Excluding Income Taxes	$ 305,282	$ (270)	$ 305,012
41	Synchronized Interest (L56)	$ -		$ -
42	Arizona Taxable Income (L39 - L40 - L41)	$ 46,351		$ 25,055
43	Arizona State Income Tax Rate	6.9680%		6.9680%
44	Arizona Income Tax (L42 x L43)	$ 3,230		$ 1,746
45	Federal Taxable Income (L42 - L44)	$ 43,121		$ 23,310
46	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ 6,468		$ 3,496
47	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ -		$ -
48	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -		$ -
49	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -		$ -
50	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -		$ -
51	Total Federal Income Tax	$ 6,468		$ 3,496
52	Combined Federal and State Income Tax (L44 + L51)	$ 9,698		$ 5,242
53	Applicable Federal Income Tax Rate [Col. [C], L51 - Col. [A], L51] / [Col. [C], L45 - Col. [A], L45]			15.0000%
	Calculation of Interest Synchronization:			
54	Rate Base (Schedule CSB-3, Col. (C), Line 14	$ 206,387		
55	Weighted Average Cost of Debt	0.0000%		
56	Synchronized Interest (L45 X L46)	$ -		

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-3

RATE BASE - ORIGINAL COST

LINE NO.		(A) COMPANY AS FILED	(B) STAFF ADJUSTMENTS	ADJ NO.	(C) STAFF AS ADJUSTED
1	Plant in Service	$ 761,698	$ -		$ 761,698
2	Less: Accumulated Depreciation	508,828	-		508,828
3	Net Plant in Service	$ 252,870	$ -		$ 252,870
	LESS:				
4	Advances in Aid of Construction (AIAC)	$ 19,004	$ (12,630)	1	$ 6,374
5	Service Line and Meter Advances	$ 42,208	$ -		$ 42,208
6	Contributions in Aid of Construction (CIAC)	$ 12,809	$ 12,630	2	$ 25,439
7	Less: Accumulated Amortization of CIAC	2,631	316	3	2,947
8	Net CIAC	$ 10,178	12,314		$ 22,492
9	Total Advances and Contributions	$ 71,390	$ (316)		$ 71,074
10	Customer Deposits	$ -	$ 11,330	4	$ 11,330
11	Accumulated Deferred Income Taxes	$ -	$ -		$ -
	ADD:				
12	Cash Working Capital Allowance	$ 37,764	$ (7,996)	5	$ 29,768
13	Materials and Supplies Inventories	$ 3,024	$ -		$ 3,024
14	Prepayments	$ 3,129	$ -		$ 3,129
15	**Total Rate Base**	$ 225,397	$ (19,010)		$ 206,387

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-4

SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	PLANT IN SERVICE Acct. No. - I Plant Description	[A] COMPANY AS FILED	[B] Adj No.1 AIAC Ref: Sch CSB-5	[C] ADJ No. 2 CIAC Ref: Sch CSB-6	[D] ADJ No. 3 Amortization of CIAC Ref: Sch CSB-7	[E] ADJ No. 4 Customer Deposits Ref: Sch CSB-8	[F] ADJ No. 5 Cash Working Capital Ref: Sch CSB-9	[G] STAFF AS ADJUSTED
1	301 Organization	$ 6,843	$ -	$ -	$ -	$ -	$ -	$ 6,843
2	303 Land and Land Rights	15,204	-	-	-	-	-	15,204
3	304 Structures and Improvements	44,339	-	-	-	-	-	44,339
4	305 Collecting and Impound Reserviors	4,350	-	-	-	-	-	4,350
5	307 Wells and Springs	27,448	-	-	-	-	-	27,448
6	309 Supply Mains	1,009	-	-	-	-	-	1,009
7	311 Pumping Equipment	46,268	-	-	-	-	-	46,268
8	320 Water Treatment Equipment	6,406	-	-	-	-	-	6,406
9	330 Distribution Reservoirs and Standpipes	51,684	-	-	-	-	-	51,684
10	331 Transmission and Distribution Mains	268,037	-	-	-	-	-	268,037
11	333 Services	30,067	-	-	-	-	-	30,067
12	334 Meters and Meter Installations	84,857	-	-	-	-	-	84,857
13	335 Hydrants	12,042	-	-	-	-	-	12,042
14	336 Backflow Prevention Devices	-	-	-	-	-	-	-
15	339 Other Plant and Miscellaneous Equipment	16,728	-	-	-	-	-	16,728
16	340 Office Furniture and Equipment	9,346	-	-	-	-	-	9,346
17	340.1 Computers and Software	-	-	-	-	-	-	-
18	341 Transportation Equipment	88,633	-	-	-	-	-	88,633
19	343 Tools, Shop, and Garage Equipment	949	-	-	-	-	-	949
20	345 Power Operated Equipment	25,405	-	-	-	-	-	25,405
21	346 Communication Equipment	22,084	-	-	-	-	-	22,084
22	347 Miscellaneous Equipment	-	-	-	-	-	-	-
23	Rounding	-	-	-	-	-	-	-
24	Total Plant in Service	$ 761,698	$ -	$ -				$ 761,698
25	Less: Accumulated Depreciation	$ 508,828	$ -	$ -	$ -	$ -	$ -	508,828
26	Net Plant in Service	$ 252,870	$ -	$ -	$ -	$ -	$ -	$ 252,870
27								
28	*LESS:*							
29	Advances in Aid of Construction (AIAC)	$ 19,004	$ (12,630)	$ -	$ -	$ -	$ -	$ 6,374
30	Meter Deposits - Service Line & Meter Advances	$ 42,208	-	-	-	-	-	$ 42,208
31								
32	Contributions in Aid of Construction (CIAC)	$ 12,809	-	12,630	-	-	-	$ 25,439
33	Less: Accumulated Amortization of CIAC	$ 2,631	-	-	316	-	-	$ 2,947
34	Net CIAC	$ 10,178	$ -	$ 12,630	$ (316)	$ -	$ -	$ 22,492
35								
36	Total Advances and Net Contributions	$ 71,390	$ (12,630)	$ 12,630	$ (316)	$ -	$ -	$ 71,074
37								
38	Customer Deposits	$ -	-	-	-	11,330	-	$ 11,330
39	Accumulated Deferred Taxes	$ -	-	-	-	-	-	$ -
40								
41	*ADD:*							
42	Cash Working Capital Allowance	$ 37,764	-	-	-	-	(7,996)	$ 29,768
43	Materials and Supplies Inventories	$ 3,024	-	-	-	-	-	$ 3,024
44	Prepayments	$ 3,129	-	-	-	-	-	$ 3,129
45	**Total Rate Base**	$ 225,397	$ 12,630	$ (12,630)	$ 316	$ (11,330)	$ (7,996)	$ 206,387

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-5

RATE BASE ADJUSTMENT NO. 1 - AIAC

LINE NO.	DESCRIPTION	[A] PER COMPANY	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	AIAC - Main Line Extension Contracts	$ 19,004	$ (12,630)	$ 6,374
2				
3				

	Contract Date	Name	Amount
4			
5			
6	6/8/1999	Allen Barras	$ 1,320
7	9/16/1999	Hoffman	$ 2,880
8	10/28/1999	Vivien & Sebastien Garote	$ 1,240
9	12/15/1999	Herb Schuerman	$ 2,640
10	12/20/1999	Lyle Garrison	$ 4,550
11			$ 12,630

References:

Column A: Company Schedule B-1 and Company's Response to CSB 1-9C
Column B: Testimony, CSB; Data Request Response CSB 1-9C
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-6

RATE BASE ADJUSTMENT NO. 2 - CIAC

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Gross CIAC	$ 12,809	$ 12,630	$ 25,439

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB; Data Request Response CSB 2.3
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-7

RATE BASE ADJUSTMENT NO. 3 - AMORTIZATION OF CIAC

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Amortization of CIAC - Per Company	$ 2,631	$ -	$ 2,631
2	Amortization of CIAC - Additions	$ -	$ 316	$ 316
3		$ 2,631	$ 316	$ 2,947
4				
5				
6				
7				
8				

9	Calculation of Amortization of CIAC			
10	CIAC Amortization Rate:		2.50%	From Line 23
11	CIAC:	$	12,630	From Line 17
12	Amortization of CIAC (Line 10 x Line 11):	$	316	
13				
14	Calculation of CIAC Addtions			
15	Inadequately Supported Plant Treated as CIAC	$	-	From Sch CSB-5
16	AIAC Converted to CIAC	$	12,630	From Sch CSB-6
17	Total CIAC Additions	$	12,630	
18				
19				
20	Calculation of CIAC Amortization Rate			
21	Amortization Rate Used In Last Rate Case:		5.00%	
22	Multiplied by:		50.00%	Half Year Convention
23	Amortization of CIAC (Line 21 x Line 22):		2.50%	

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-8

RATE BASE ADJUSTMENT NO. 4 - CUSTOMER DEPOSITS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Customer Deposits	$ -	$ 11,330	$ 11,330

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB; Data Request Response CSB 1-10
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-9

RATE BASE ADJUSTMENT NO. 5 - CASH WORKING CAPITAL

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Cash Working Capital	$ 37,764	$ (7,996)	$ 29,768

Operation & Maintenance *	$	215,387
Multiplied by	x	1/8
	$	26,923
Purchased Power and Purchased Water	$	22,757
Multiplied by	x	1/24
	$	2,845
Total Cash Working Capital	$	29,768

* Less depreciation, taxes, purchased power, and purchased water.

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-10

OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] STAFF TEST YEAR ADJUSTMENTS	ADJ NO.	[C] STAFF TEST YEAR AS ADJUSTED	[D] STAFF PROPOSED CHANGES	[E] STAFF RECOMMENDED
	REVENUES:						
1	Metered Water Sales	$ 344,260	$ -		$ 344,260	$ (21,566)	$ 322,694
2	Water Sales - Unmetered	-	-		-		-
3	Other Operating Revenues	7,373	-		7,373	-	7,373
4	**Total Revenues**	$ 351,633	$ -		$ 351,633	$ (21,566)	$ 330,067
5							
6	*EXPENSES:*						
7	Salaries and Wages - Employees	$ 126,312	$ (31,204)	1	$ 95,108	$ -	$ 95,108
8	Salaries and Wages - Officers, Dir, Stcklhdrs	35,498	(4,879)	2	30,619	-	30,619
9	Purchased Water	100	-		100	-	100
10	Purchased Power	22,657	-		22,657	-	22,657
11	Chemicals	884	-		884	-	884
12	Materials & Supplies & Repairs & Maint	16,148	-		16,148	-	16,148
13	Office Supplies & Expenses	17,050	-		17,050	-	17,050
14	Contractual Services - Engineering	-	-		-	-	-
15	Contractual Services - Accounting	600	-		600	-	600
16	Contractual Services - Legal	3,995	(2,995)	3	1,000	-	1,000
17	Contractual Services - Testing	7,062	(2,296)	4	4,766	-	4,766
18	Contractual Services - Other	9,263	-		9,263	-	9,263
19	Rents	6,000	-		6,000	-	6,000
20	Equipment Rental	246	-		246	-	246
21	Transportation Expenses	15,726	(1,582)	5	14,144	-	14,144
22	Insurance - General Liability	11,848	(3,874)	6	7,974	-	7,974
23	Insurance - Worker's Compensation	2,555	-		2,555	-	2,555
24	Insurance - Other	165	-		165	-	165
25	System Support	4,339	(1,483)	7	2,856	-	2,856
26	Reg. Comm. Exp. - Rate Case	442	698	8	1,140	-	1,140
27	Bad Debt Expense	1,356	-		1,356	-	1,356
28	Miscellaneous Expense	4,089	(3,486)	9	603	-	603
29	Licensing & Permits	2,910	-		2,910	-	2,910
30	Tax - Other	6,446	-		6,446	-	6,446
31	Property Taxes	22,329	(10,141)	10	12,187	(270)	11,917
32	Payroll Taxes	10,804	(1,212)	11	9,592	-	9,592
33	Depreciation	25,132	13,780	12	38,912	-	38,912
34	**Operating Expenses Before Income Taxes**	$ 353,956	$ (48,674)		$ 305,282	$ (270)	$ 305,012
35	Income Taxes	(45)	9,743	13	9,698	(4,456)	5,242
36	**Total Operating Expenses**	353,911	(38,931)		314,980	(4,726)	310,254
37							
38	**Operating Income (Loss)**	$ (2,278)	$ 38,931		$ 36,653	$ (16,840)	$ 19,813

References:
Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-11
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] ADJ #1 Salaries & Wages Employees Ref: Sch CSB-12	[C] ADJ #2 Salaries & Wages Offcrs, Dir, Stock Ref: Sch CSB-13	[D] ADJ #3 Contract Services Legal Ref: Sch CSB-14	[E] ADJ #4 Contract Services Testing Ref: Sch CSB-15	[F] ADJ #5 Transportation Expense Ref: Sch CSB-16	[G] ADJ #6 Insurance, General Liability Ref: Sch CSB-17	[H] ADJ #7 System Support Ref: Sch CSB-18	Subtotal
	REVENUES:									
1	Metered Water Sales	$ 344,260	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 344,260
2	Water Sales - Unmetered	-	-	-	-	-	-	-	-	-
3	Other Operating Revenues	7,373	-	-	-	-	-	-	-	7,373
4	**Total Revenues**	$ 351,633	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 351,633
5										
6	*OPERATING EXPENSES:*									
7	Salaries and Wages - Employees	$ 126,312	(31,204)	-	-	-	-	-	-	95,108
8	Salaries and Wages - Officers, Dir, Stcklhdr	35,498		(4,879)						30,619
9	Purchased Water	100	-	-	-	-	-	-	-	100
10	Purchased Power	22,657	-	-	-	-	-	-	-	22,657
11	Chemicals	884	-	-	-	-	-	-	-	884
12	Materials & Supplies & Repairs & Maint	16,148	-	-	-	-	-	-	-	16,148
13	Office Supplies & Expenses	17,050								17,050
14	Contractual Services - Engineering	-	-	-	-	-	-	-	-	-
15	Contractual Services - Accounting	600	-	-	-	-	-	-	-	600
16	Contractual Services - Legal	3,995	-	-	(2,995)	-	-	-	-	1,000
17	Contractual Services - Testing	7,062	-	-	-	(2,296)	-	-	-	4,766
18	Contractual Services - Other	9,263	-	-	-	-	-	-	-	9,263
19	Rents	6,000	-	-	-	-	-	-	-	6,000
20	Equipment Rental	246	-	-	-	-	-	-	-	246
21	Transportation Expenses	15,726	-	-	-	-	(1,582)	-	-	14,144
22	Insurance - General Liability	11,848	-	-	-	-	-	(3,874)	-	7,974
23	Insurance - Worker's Compensation	2,555	-	-	-	-	-	-	-	2,555
24	Insurance - Other	165	-	-	-	-	-	-	-	165
25	System Support	4,339	-	-	-	-	-	-	(1,483)	2,856
26	Reg. Comm. Exp. - Rate Case	442	-	-	-	-	-	-	-	442
27	Bad Debt Expense	1,356	-	-	-	-	-	-	-	1,356
28	Miscellaneous Expense	4,089	-	-	-	-	-	-	-	4,089
29	Licensing & Permits	2,910	-	-	-	-	-	-	-	2,910
30	Tax - Other	6,446	-	-	-	-	-	-	-	6,446
31	Property Taxes	22,329	-	-	-	-	-	-	-	22,329
32	Payroll Taxes	10,804	-	-	-	-	-	-	-	10,804
33	Depreciation	25,132	-	-	-	-	-	-	-	25,132
34										
35	**Operating Expenses Before Income Taxes**	$ 353,956	$ (31,204)	$ (4,879)	$ (2,995)	$ (2,296)	$ (1,582)	$ (3,874)	$ (1,483)	$ 305,643
36	Income Taxes	$ (45)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	(45)
37	**Total Operating Expenses**	$ 353,911	$ (31,204)	$ (4,879)	$ (2,995)	$ (2,296)	$ (1,582)	$ (3,874)	$ (1,483)	$ 305,598
38										
39	**Operating Income (Loss)**	$ (2,278)	$ 31,204	$ 4,879	$ 2,995	$ 2,296	$ 1,582	$ 3,874	$ 1,483	$ 46,035

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR CONTINUED

LINE NO.	DESCRIPTION	[I] ADJ #8 Rate Case Expense Ref: Sch CSB-19	[J] ADJ #9 Miscellaneous Expense Ref: Sch CSB-20	[K] ADJ #10 Property Taxes Ref: Sch CSB-21	[L] ADJ #11 Payroll Taxes Ref: Sch CSB-22	[M] ADJ #12 Depreciation Expense Ref: Sch CSB-23	[N] ADJ #13 Income Taxes Ref: Sch CSB-24	[O] STAFF ADJUSTED
	REVENUES:							
1	Metered Water Sales	$ -	$ -	$ -	$ -	$ -	$ -	$ 344,260
2	Water Sales - Unmetered	-	-	-	-	-	-	-
3	Other Operating Revenues	-	-	-	-	-	-	7,373
4	**Total Revenues**	$ -	$ -	$ -	$ -	$ -	$ -	$ 351,633
5								
6	*OPERATING EXPENSES:*							
7	Salaries and Wages - Employees	-	-	-	-	-	-	95,108
8	Salaries and Wages - Officers, Dir, Stcklhdrs	-	-	-	-	-	-	30,619
9	Purchased Water	-	-	-	-	-	-	100
10	Purchased Power	-	-	-	-	-	-	22,657
11	Chemicals	-	-	-	-	-	-	884
12	Materials & Supplies & Repairs & Maint	-	-	-	-	-	-	16,148
13	Office Supplies & Expenses	-	-	-	-	-	-	17,050
14	Contractual Services - Engineering	-	-	-	-	-	-	-
15	Contractual Services - Accounting	-	-	-	-	-	-	600
16	Contractual Services - Legal	-	-	-	-	-	-	1,000
17	Contractual Services - Testing	-	-	-	-	-	-	4,766
18	Contractual Services - Other	-	-	-	-	-	-	9,263
19	Rents	-	-	-	-	-	-	6,000
20	Equipment Rental	-	-	-	-	-	-	246
21	Transportation Expenses	-	-	-	-	-	-	14,144
22	Insurance - General Liability	-	-	-	-	-	-	7,974
23	Insurance - Worker's Compensation	-	-	-	-	-	-	2,555
24	Insurance - Other	-	-	-	-	-	-	165
25	System Support	-	-	-	-	-	-	2,856
26	Reg. Comm. Exp. - Rate Case	698	-	-	-	-	-	1,140
27	Bad Debt Expense	-	-	-	-	-	-	1,356
28	Miscellaneous Expense	-	(3,486)	-	-	-	-	603
29	Licensing & Permits	-	-	-	-	-	-	2,910
30	Tax - Other	-	-	-	-	-	-	6,446
31	Property Taxes	-	-	(10,141)	-	-	-	12,187
32	Payroll Taxes	-	-	-	(1,212)	-	-	9,592
33	Depreciation	-	-	-	-	13,780	-	38,912
34								
35	**Operating Expenses Before Income Taxes**	$ 698	$ (3,486)	$ (10,141)	$ (1,212)	$ 13,780	$ -	$ 305,282
36	Income Taxes	$ -	$ -	$ -	$ -	$ -	$ 9,743	9,698
37	**Total Operating Expenses**				$ (1,212)	$ 13,780	$ 9,743	$ 314,980
38								
39	**Operating Income (Loss)**	$ -	$ -	$ -	$ 1,212	$ (13,780)	$ (9,743)	$ 36,653

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-12

OPERATING INCOME ADJUSTMENT NO. 1 - SALARY AND WAGES, EMPLOYEES

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Salary & Wages, Employees	$ 126,312	$ (31,204)	$ 95,108

		Salaries & Wages Employees	
To remove salaries & wages provided for in Granite Mountain rate case	$	(19,563)	Docket No. W-02467A-09-0333
To remove $10,400 salary and wage increase pro forma adjustment	$	(10,400)	Data Request Response CSB 1-1
To reflect $1 wage increase that became effective on February 8, 2010	$	2,080	Data Request Response CSB 4-4
To annualize $2 wage increase that occurred on April 1, 2009 (CSB 1-1b)	$	1,040	(2,080 hrs / 12) x 3 months x $2
To normalize overtime charges	$	(2,761)	From line 25
To remove bonuses	$	(1,600)	Per GL acct no. 6601.00
Total	$	(31,204)	

	Normalized Overtime Charges
2007	$ 1,575
2008	$ 3,798
2009	$ 6,828
	$ 12,201
Divided by 3 years	3
Staff's normalized overtime charges	$ 4,067
Company proposed overtime charges	$ 6,828
Staff's adjustment	$ (2,761)

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB; Data Request Response CSB 1-1b, 1-15d, CSB 1-32, CSB 4-4, CSB 4-9, & Sch CRM-3 in Docket No W-02467A-09-0333

Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-13

OPERATING INCOME ADJUSTMENT NO. 2 - SALARY AND WAGES, OFFICERS, DIRECTORS, STOCKHOLDERS

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Salary & Wages, Officers, Directors, Stockholders	35,498	$ (4,879)	$ 30,619

	[D] Hours Worked Per Week	[E] Hours Worked Per Month
Supervision and management of company personnel	3	12
Review of fiduciary responsibilities including accounts payable and accounts receivable	3	12
Review payroll	1	4
Sign checks for payroll and accounts payable	1	4
Meet with Company mgmnt to address concerns, equipment repair and/or water plant facilities	5	20
Project management	0	0
Acquire regulate and oversee company loans and long-term debts	2	8
Ensuring that proper equipment and procedures are in place to adequately supply drinking water	2	8
Review & advise Company on manuals such as employee handbook & emergency response manual	0	1
	17	69
$35,498 / (80 hrs per month x 12 months) = $35,498 / 960 hrs = $36.98		x $36.98
		$2,551.62
		x 12 months
		$30,619.44

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB; CSB 1-16e, CSB 1-16f, CSB 4-3

Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-14

OPERATING INCOME ADJUSTMENT NO. 3 - CONTRACT SERVICES LEGAL

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Contract Services - Legal	$ 3,995	$ (2,995)	$ 1,000
2				
3				
4				
5				
6				
7			Contract Services Legal	
8	To remove costs related to the potential sale of the Company		$ (3,995)	
9	To provide for a reasonable level of ongoing legal expense		$ 1,000	
10	Staff's adjustment		$ (2,995)	

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB; Company Data Request Responses to CSB 1-23

Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-15

OPERATING INCOME ADJUSTMENT NO. 4 - CONTRACT SERVICES TESTING

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Contract Services - Testing	$ 7,062	$ (2,296)	$ 4,766

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB

Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-16

OPERATING INCOME ADJUSTMENT NO. 5 - TRANSPORTATION EXPENSE

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS	STAFF AS ADJUSTED
1	Transportation Expense	15,726	$ (1,582)	$ 14,144

Transportation Expense			
	Amount Before Allocation	Allocation Percentage	Allocated Amount
Chino Meadows	**$ 15,726.00**	**0.899383984**	**$ 14,143.71**
Granite Mountain	$ 15,726.00	0.100616016	$ 1,582.29
		1.000000	$ 15,726.00

Number of Customers by Company			
Source: Chino Meadows, application; Granite Mtn, 2009 Annual Report, p. 12			
	Chino Meadows	Granite Mountain	Total
No. of Customers	**876**	98	974
No. of Customers Allocation %:	**0.89938398**	0.100616016	1.00

References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 1.29
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-17

OPERATING INCOME ADJUSTMENT NO. 6- INSURANCE, GENERAL LIABILITY

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Insurance, General Liability	11,848	$ (3,874)	$ 7,974

Transportation Expense			
	Amount Before Allocation	Allocation Percentage	Allocated Amount
Chino Meadows	**$ 11,848.00**	**0.673030810**	**$ 7,974.07**
Granite Mountain	$ 11,848.00	0.326969190	$ 3,873.93
		1.000000	$ 11,848.00

Calculation of Two-Factor Allocation				
	[A]	[B]	[C]	[D]
	Number of Customers	Net Plant	Total (Col A+B)	Allocation % (Col C / 2)
Chino Meadows	**0.90**	**0.4**	**1.35**	**0.673030810**
Granite Mountain	0.10	0.55	0.65	0.326969190
	1.00000000	1.00000000	2.00000000	1.00000000

Number of Customers by Company				
Source: Chino Meadows, application; Granite Mtn, 2009 Annual Report, p. 12, Ant Lks CSB 4-8				
	Chino Meadows	Granite Mountain	Antelope Lakes	Total
No. of Customers	**876**	98	-	974
No. of Customers Allocation %:	**0.90**	0.10	0.00	1.00

Net Plant by Company				
Source: Chino Meadows, Sch CSB-3; Granite Mtn , 2009 Annual Report, p. 12				
	Chino Meadows	Granite Mountain	Antelope Lakes	Total
Net Plant	**252,870**	313,243	-	566,113
Net Plant Allocation %:	**0.4**	0.55	0.00	1.0

References:

Column A: Company Schedule C-1 & E-2
Column B: Testimony, CSB; Data Request CSB 1.29
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-18

OPERATING INCOME ADJUSTMENT NO. 7 - SYSTEM SUPPORT

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	System Support	$ 4,339	$ (1,483)	$ 2,856

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB

Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-19

OPERATING INCOME ADJUSTMENT NO. 8 - RATE CASE EXPENSE

LINE NO.	Description	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS	[C] STAFF AS ADJUSTED
1	Rate Case Expense	$ 442	$ 698	$ 1,140

	Per Company	Difference	Per Staff
	$ 1,326	$ 4,374	$ 5,700
Divided by	3	2	5
	442	698	1,140

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-20

OPERATING INCOME ADJUSTMENT NO. 9 - MISCELLANEOUS EXPENSE

LINE NO.	DESCRIPTION	[A] COMPANY AS FILED	[B] STAFF ADJUSTMENTS (Col C - Col A)	[C] STAFF AS ADJUSTED
1	Miscellaneous Expense	$ 4,089	$ (3,486)	$ 603

Out of Test Year Expense (Payment on old bank debt)	$	1,237.00
Gifts	$	38.40
Food & Beverages	$	1,002.39
Luncheons & Dinners	$	758.45
Employee Parties	$	449.79
Subtotal	$	2,249.03
Total	$	3,486.03

References:
Column A: Company Schedule C-2
Column B: Testimony, CSB; Data Request CSB 1-18 & 1-29
Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-21

OPERATING INCOME ADJUSTMENT NO. 10 - PROPERTY TAX EXPENSE

LINE NO.	Property Tax Calculation	[A] STAFF AS ADJUSTED	[B] STAFF RECOMMENDED
1	Staff Adjusted Test Year Revenues	$ 351,633	$ 351,633
2	Weight Factor	2	2
3	Subtotal (Line 1 * Line 2)	703,265	$ 703,265
4	Staff Recommended Revenue, Per Schedule CSB-1	351,633	$ 330,067
5	Subtotal (Line 4 + Line 5)	1,054,898	1,033,333
6	Number of Years	3	3
7	Three Year Average (Line 5 / Line 6)	351,633	$ 344,444
8	Department of Revenue Mutilplier	2	2
9	Revenue Base Value (Line 7 * Line 8)	703,265	$ 688,888
10	Plus: 10% of CWIP -	-	-
11	Less: Net Book Value of Licensed Vehicles	54,837	$ 54,837
12	Full Cash Value (Line 9 + Line 10 - Line 11)	648,428	$ 634,051
13	Assessment Ratio	21.0%	21.0%
14	Assessment Value (Line 12 * Line 13)	136,170	$ 133,151
15	Composite Property Tax Rate	8.9500%	8.9500%
			$ -
16	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	$ 12,187	
17	Company Proposed Property Tax	22,329	
18	Staff Test Year Adjustment (Line 16-Line 17)	$ (10,141)	
19	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)		$ 11,917
20	Staff Test Year Adjusted Property Tax Expense (Line 16)		$ 12,187
21	Increase in Property Tax Expense Due to Increase in Revenue Requirement		$ (270)
22	Increase to Property Tax Expense		$ (270)
23	Increase in Revenue Requirement		(21,566)
24	Increase to Property Tax per Dollar Increase in Revenue (Line19/Line 20)		1.253000%

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-22

OPERATING INCOME ADJUSTMENT NO. 11 - PAYROLL TAXES

		[A]	[B]	[C]
LINE NO.	DESCRIPTION	COMPANY AS FILED	STAFF ADJUSTMENTS (Col C - Col A)	STAFF AS ADJUSTED
1	Payroll Taxes	$ 22,329	$ (1,212)	$ 21,117

References:

Column A: Company Schedule C-2

Column B: Testimony, CSB;

Column C: Column [A] + Column [B]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-23

OPERATING INCOME ADJUSTMENT NO. 12 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

LINE NO.		DESCRIPTION	[A] PLANT In SERVICE Per Staff	[B] NonDepreciable & Fully Depreciated PLANT	[C] DEPRECIABLE PLANT (Col A - Col B)	[D] DEPRECIATION RATE	[E] DEPRECIATION EXPENSE (Col C x Col D)
1	301	*Organization*	$ 6,843	$ 6,843	$ -	0.00%	$ -
2	303	Land and Land Rights	15,204	15,204	-	0.00%	-
3	304	Structures and Improvements	44,339	-	44,339	3.33%	1,476
4	305	Collecting and Impound Reservoirs	4,350	-	4,350	2.50%	109
5	307	Wells and Springs	27,448	9,096	18,352	3.33%	611
6	309	Supply Mains	1,009	-	1,009	2.00%	20
7	311	Pumping Equipment	46,268	-	46,268	12.50%	5,783
8	320	Water Treatment Equipment	6,406	-	6,406	3.33%	213
9	330	Distribution Reservoirs and Standpipes	51,684	21,661	30,023	2.22%	667
10	331	Transmission and Distribution Mains	268,037	167,988	100,049	2.00%	2,001
11	333	Services	30,067	7,181	22,886	3.33%	762
12	334	Meters and Meter Installations	84,857	-	84,857	8.33%	7,069
13	335	Hydrants	12,042	-	12,042	2.00%	241
14	336	Backflow Prevention Devices	-	-	-	6.67%	-
15	339	Other Plant and Miscellaneous Equipment	16,728	1,305	15,423	6.67%	1,029
16	340	Office Furniture and Equipment	9,346	-	9,346	6.67%	623
17	340.1	Computers and Software	-	-	-	20.00%	-
18	341	Transportation Equipment	88,633	-	88,633	20.00%	17,727
19	343	Tools, Shop, and Garage Equipment	949	-	949	5.00%	47
20	345	Power Operated Equipment	25,405	18,377	7,028	5.00%	351
21	346	Communication Equipment	22,084	-	22,084	10.00%	2,208
22	347	Miscellaneous Equipment	-	-	-	10.00%	-
24		Total Plant	$ 761,698	$ 225,608	$ 514,043		$ 40,938

Composite Depreciation Rate (Depr Exp / Depreciable Plant):		7.96%
CIAC:	$	25,439
Amortization of CIAC (Line 32 x Line 33):	$	2,026
Depreciation Expense Before Amortization of CIAC:	$	40,938
Less Amortization of CIAC:	$	2,026
Test Year Depreciation Expense - Staff:	$	38,912
Depreciation Expense - Company:		25,132
Staff's Total Adjustment:	**$**	**13,780**

References:
Column [A]: Schedule CSB-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-24

OPERATING INCOME ADJUSTMENT NO. 13 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	(A)	(B)
	Calculation of Income Tax:	Test Year	
1	Revenue	$ 351,633	
2	Less: Operating Expenses - Excluding Income Taxes	$ 305,282	
3	Less: Synchronized Interest (L17)	$ -	
4	Arizona Taxable Income (L1- L2 - L3)	$ 46,351	
5	Arizona State Income Tax Rate	6.968%	
6	Arizona Income Tax (L4 x L5)		$ 3,230
7	Federal Taxable Income (L4 - L6)	$ 43,121	
8	Federal Tax on First Income Bracket ($1 - $50,000) @ 15%	$ 6,468	
9	Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25%	$ -	
10	Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34%	$ -	
11	Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39%	$ -	
12	Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34%	$ -	
13	Total Federal Income Tax		$ 6,468
14	Combined Federal and State Income Tax (L6 + L13)		$ 9,698
	Calculation of Interest Synchronization:		
15	Rate Base (Schedule CSB-13, Col. (C), Line 16)	$ 206,387	
16	Weighted Average Cost of Debt	0.00%	
17	Synchronized Interest (L16 x L17)	$ -	
18	Income Tax - Per Staff	$ 9,698	
19	Income Tax - Per Company	$ (45)	
20	**Staff Adjustment**	**$ 9,743**	

Chino Meadows II Water Company
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-25

RATE DESIGN

	Present Rates	Company Proposed	Staff Recommended
Monthly Customer Charge:			
5/8" x 3/4" Meter	$18.75	$23.26	$17.60
3/4" Meter	28.13	34.90	26.40
1" Meter	46.88	58.16	44.00
1½" Meter	93.75	116.32	88.00
2" Meter	150.00	186.11	140.80
3" Meter	N/A	418.74	264.00
4" Meter	N/A	701.62	440.00
6" Meter	N/A	1,395.79	880.00
Gallons Included In Monthly Customer Charge:	1,000	1,000	0
Commodity Charges - Per 1,000 Gallons of Usage			
Per 1,000 gallons for all usage	$ 3.12	N/A	N/A
In Excess of 1,000 Gallons for All Meter Sizes			
0 to 10,000 Gallons	N/A	$3.52	N/A
10,001 to 20,000 Gallons	N/A	$3.75	N/A
All Gallons in Excess of 20,000	N/A	$4.34	N/A
0 to 3,000 Gallons	N/A	N/A	$2.05
3,001 to 8,000 Gallons	N/A	N/A	$2.80
All Gallons in Excess of 8,000	N/A	N/A	$3.58

	Present	Company Proposed			Staff Recommended		
Service Line and Meter Installation Charges	Rates	Services	Meters	Total	Services	Meters	Total
5/8" x 3/4" Meter	$350.00	$406.00	$95.00	$500.00	$406.00	$95.00	$501.00
3/4" Meter	360.00	413.00	162.00	$575.00	413.00	162.00	$575.00
1" Meter	420.00	441.00	209.00	$650.00	441.00	209.00	$650.00
1 1/2" Meter	540.00	395.00	321.00	$716.00	395.00	321.00	$716.00
2" Meter	660.00	727.00	845.00	$1,572.00	727.00	845.00	$1,572.00
3" Meter	N/A	952.00	1,448.00	$2,400.00	952.00	1,448.00	$2,400.00
4" Meter	N/A	1,310.00	2,206.00	$3,516.00	1,310.00	2,206.00	$3,516.00
6" Meter	N/A	2,160.00	4,756.00	$6,916.00	2,160.00	4,756.00	$6,916.00

Service Charges			
Establishment	$15.00	$25.00	$25.00
Establishment (After Hours)	30.00	35.00	Eliminate
Reconnection (Delinquent)	22.00	35.00	30.00
Reconnection (Delinquent) After Hours	N/A	45.00	Eliminate
After Hours Charge (Flat Rate)	N/A	N/A	25.00
Meter Test (If Correct)	15.00	35.00	20.00
Deposit	*	*	*
Deposit Interest (Per Year)	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	15.00	20.00	20.00
Deferred Payment (Per Month)	1.50%	1.00%	1.50%
Meter Re-Read (If Correct)	12.00	15.00	15.00
Late Fee (Per Month)	N/A	***	1.50%
Monthly Service Charge for Fire Sprinkler			
4" or Smaller	N/A	N/A	****
6"	N/A	N/A	****
8"	N/A	N/A	****
10"	N/A	N/A	****
Larger than 10"	N/A	N/A	****

* Per Commission Rules (R14-2-403.B)
** Months off system times the minimum (R14-2-403.D)
*** 1.50 percent of unpaid balance per month
**** 2.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than $10.00 per month. The Service Charge for Fire Sprinklers is only applicable for service lines seperate and distinct from the primary water service line.

Chino Meadows II Water Co.
Docket No. W-02370A-10-0519
Test Year Ended December 31, 2009

Schedule CSB-26

TYPICAL BILL ANALYSIS
General Service 5/8 x 3/4 - Inch Meter

Average Number of Customers: 876

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Increase	Percent Increase
Average Usage	5,348	$32.32	$38.56	$6.25	19.3%
Median Usage	4,280	$28.98	$34.80	$5.82	20.1%
Staff Proposed					
Average Usage	5,348	$32.32	$30.12	($2.19)	-6.8%
Median Usage	4,280	$28.98	$27.29	($1.69)	-5.8%

Present & Proposed Rates (Without Taxes)
General Service 5/8 x 3/4 - Inch Meter

Gallons Consumption	Present Rates	Company Proposed Rates	% Increase	Staff Proposed Rates	% Increase
0	$18.75	$23.26	24.1%	$17.60	-6.1%
1,000	18.75	23.26	24.1%	19.70	5.1%
2,000	21.87	26.78	22.5%	21.80	-0.3%
3,000	24.99	30.30	21.2%	23.90	-4.4%
4,000	28.11	33.82	20.3%	26.55	-5.5%
5,000	31.23	37.34	19.6%	29.20	-6.5%
6,000	34.35	40.86	19.0%	31.85	-7.3%
7,000	37.47	44.38	18.4%	34.50	-7.9%
8,000	40.59	47.90	18.0%	37.15	-8.5%
9,000	43.71	51.42	17.6%	40.30	-7.8%
10,000	46.83	54.94	17.3%	43.45	-7.2%
15,000	62.43	73.69	18.0%	59.20	-5.2%
20,000	78.03	92.44	18.5%	74.95	-3.9%
25,000	93.63	114.14	21.9%	90.70	-3.1%
50,000	171.63	222.64	29.7%	169.45	-1.3%
75,000	249.63	331.14	32.7%	248.20	-0.6%
100,000	327.63	439.64	34.2%	326.95	-0.2%
125,000	405.63	548.14	35.1%	405.70	0.0%
150,000	483.63	656.64	35.8%	484.45	0.2%
175,000	561.63	765.14	36.2%	563.20	0.3%
200,000	639.63	873.64	36.6%	641.95	0.4%